

10-053 663

## Protein Sequence Searches - February 2005

All of the sequence databases on ABSS have recently been updated.

- Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary accession number.
- If you encounter an accession number from an older search run against UniProt (results file extension **.rup**) that can no longer be found in the database, the permanent record with the new accession number can be found by searching the old accession number in the UniProt Protein Archive database (UniPARC) at:

<http://www.pir.uniprot.org/database/archive.shtml>

If you have any questions regarding this information or your results, please contact any STIC searcher.

**When submitting sequence search results for scanning into IFW, please include a copy of this attachment to assist any future Examiners or members of the public who may encounter UniProt temporary accession numbers.**

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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:38:05 ; Search time 23.5 Seconds  
(without alignments)  
20.472 Million cell updates/sec

Title: SEQ1  
Perfect score: 27  
Sequence: 1 ffglm 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 206

Minimum DB seq length: 0  
Maximum DB seq length: 5

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR 79:\*  
1: pir1.\*  
2: pir2.\*  
3: pir3.\*  
4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	18	66.7	5	2	PT0278
2	14	51.9	5	2	A44955
3	12	44.4	4	2	J01273
4	11	40.7	5	2	A61445
5	10	37.0	4	2	PT0240
6	10	37.0	4	2	A53284
7	10	37.0	5	2	G44817
8	10	37.0	5	2	I44817
9	10	37.0	5	2	E44817
10	10	37.0	5	2	C44817
11	10	37.0	5	2	A44817
12	9	33.3	3	3	S68328
13	9	33.3	5	2	A32516
14	9	33.3	5	2	PQ0689
15	9	33.3	5	2	B61445
16	8	29.6	4	2	PT0633
17	8	29.6	5	2	PT0572
18	7	25.9	3	3	B23751
19	7	25.9	4	2	E44823
20	7	25.9	4	2	B53284
21	7	25.9	5	2	T10954
22	7	25.9	5	2	JH0253
23	7	25.9	5	2	S69237
24	6	22.2	3	3	PT0636
25	6	22.2	3	3	PT0571
26	6	22.2	3	3	GKHU
27	6	22.2	3	3	A60898
28	6	22.2	3	3	A23751
29	6	22.2	4	1	EXAA

30	6	22.2	4	2	D41654
31	6	22.2	4	2	S53508
32	6	22.2	4	2	T30569
33	6	22.2	4	2	I38888
34	6	22.2	4	2	A25844
35	6	22.2	4	2	A34626
36	6	22.2	4	2	S39390
37	6	22.2	4	2	S43959
38	6	22.2	4	2	S47552
39	6	22.2	4	2	S09478
40	6	22.2	4	2	PL0140
41	6	22.2	4	2	A35779
42	6	22.2	4	2	A60418
43	6	22.2	4	2	A32480
44	6	22.2	4	2	PT0271
45	6	22.2	4	2	PT0711

ALIGNMENTS

RESULT 1

PT0278

Ig heavy chain CRD3 region (clone 4-88) - human (fragment)

C:Species: Homo sapiens (man)

C>Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-1996

C:Accession: PT0278

R:Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.

J. Exp. Med. 173, 395-407, 1991

A:Title: Preferential utilization of specific immunoglobulin heavy chain diversity and j

A:Reference number: PT0222; MUID:91108337; PMID:1899102

A:Accession: PT0278

A:Molecule type: DNA

A:Residues: 1-5 <YAM>

A:Experimental source: B lymphocyte

C:Keywords: heterotetramer; immunoglobulin

Query Match 66.7%; Score 18; DB 2; Length 5;

Best Local Similarity 40.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFGLM 5

Db 1 YFGVL 5

RESULT 2

A44955

alkanal monooxygenase (FMN-linked) (EC 1.14.14.3) alpha chain - Vibrio harveyi (fragment)

C:Species: Vibrio harveyi

C>Date: 03-Jun-1993 #sequence\_revision 03-Jun-1993 #text\_change 26-May-2000

C:Accession: A44955

R:Paguette, O.; Tu, S.C.

Photochem. Photobiol. 50, 817-825, 1989

A:Title: Chemical modification and characterization of the alpha cysteine 106 at the Vibr

A:Reference number: A44955; MUID:90175700; PMID:2626493

A:Accession: A44955

A>Status: preliminary

A:Molecule type: protein

A:Residues: 1-5 <PAQ>

C:Keywords: FMN; luminescence; monooxygenase; oxidoreductase

Query Match 51.9%; Score 14; DB 2; Length 5;

Best Local Similarity 66.7%; Pred. No. 2.8e+05;

Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 FGL 4

Db 1 FGI 3

RESULT 3

JQ1273

neuropeptide Antho-Kamide - sea anemone (Anthopleura elegantissima)  
 C;Species: Anthopleura elegantissima  
 C;Date: 31-Mar-1992 #sequence\_revision 04-Dec-1992 #text\_change 09-Jul-2004  
 C;Accession: JQ1273  
 R;Nothacker, H.P.; Rinehart, K.L.; Grimmelikhuijzen, C.J.P.  
 Biochem. Biophys. Res. Commun. 179, 1205-1211, 1991  
 A;Title: Isolation of L-3-phenylalanyl-Phe-Lys-Ala-NH<sub>2</sub> (Antho-Kamide), a novel neuropeptide  
 A;Reference number: JQ1273; MUID:92028852; PMID:1681803  
 A;Accession: JQ1273  
 A;Molecule type: protein  
 A;Residues: 1-4 <NOT>  
 A;Cross-references: UNIPROT:P58705  
 C;Comment: The carboxyl-terminal amide probably arises from cleavage of a following glycosylated peptide  
 C;Keywords: amidated carboxyl end; neuropeptide; phenylalanylation  
 F;1/Modified site: L-3-phenylalanyl-Phe-Lys-Ala-NH<sub>2</sub> #status experimental  
 F;4/Modified site: amidated carboxyl end (Ala) #status experimental

Query Match 44.4%; Score 12; DB 2; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FF 2  
 ||  
 Db 1 FF 2

RESULT 4  
 A61445  
 Met-enkephalin - blue mussel  
 C;Species: Mytilus edulis (blue mussel)  
 C;Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 21-Jan-2000  
 C;Accession: A61445  
 R;Leung, M.K.; Stefano, G.B.  
 Proc. Natl. Acad. Sci. U.S.A. 81, 955-958, 1984  
 A;Title: Isolation and identification of enkephalins in pedal ganglia of Mytilus edulis  
 A;Reference number: A61445; MUID:84144823; PMID:6583690  
 A;Accession: A61445  
 A;Molecule type: protein  
 A;Residues: 1-5 <LEU>  
 A;Experimental source: pedal ganglia  
 C;Keywords: neuropeptide; opioid peptide

Query Match 40.7%; Score 11; DB 2; Length 5;  
 Best Local Similarity 66.7%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GLM 5  
 ||  
 Db 3 GFM 5

RESULT 5  
 PT0240  
 Ig heavy chain CRD3 region (clone 2-100B) - human (fragment)  
 C;Species: Homo sapiens (man)  
 C;Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-1996  
 C;Accession: PT0240  
 R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.  
 J. Exp. Med. 173, 395-407, 1991  
 A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and J  
 A;Reference number: PT0222; MUID:91108337; PMID:1899102  
 A;Accession: PT0240  
 A;Molecule type: DNA  
 A;Residues: 1-4 <YAM>  
 A;Experimental source: B lymphocyte  
 C;Keywords: heterotetramer; immunoglobulin

Query Match 37.0%; Score 10; DB 2; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 GL 4  
 ||  
 Db 3 GL 4

Db 3 GL 4

RESULT 6

A53284

T-cell receptor beta 2 chain D region, Dbeta2 - rabbit  
 C;Species: Oryctolagus cuniculus (domestic rabbit)

C;Date: 02-May-1994 #sequence\_revision 18-Nov-1994 #text\_change 05-Nov-1999

C;Accession: A53284

R;Harindranath, N.; Alexander, C.B.; Mage, R.G.

Mol. Immunol. 28, 881-888, 1991

A;Title: Evolutionarily conserved organization and sequences of germline diversity and J

A;Reference number: A53284; MUID:91342695; PMID:1678859

A;Accession: A53284

A;Status: preliminary

A;Molecule type: DNA

A;Residues: 1-4 &lt;HAR&gt;

A;Cross-references: GB:S60737; NID:G233916; PIDN:AAB19517.1; PID:G233917

A;Note: sequence extracted from NCBI backbone (NCBIN:60737, NCBIP:60739)

C;Keywords: T-cell receptor

Query Match 37.0%; Score 10; DB 2; Length 4;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 GL 4

||

Db 1 GL 2

RESULT 7

G44817

27.5 kDa structural protein - Leuconostoc oenos phase P32 (fragment)

C;Species: Leuconostoc oenos phase P32

C;Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998

C;Accession: G44817

R;Arendt, E.K.; Lonvaud, A.; Hammes, W.P.

J. Gen. Microbiol. 137, 2135-2139, 1991

A;Title: Lysozyme in Leuconostoc oenos.

A;Reference number: A44817; MUID:92085033; PMID:1748868

A;Accession: G44817

A;Molecule type: protein

A;Residues: 1-5 &lt;ARE&gt;

A;Note: sequence extracted from NCBI backbone (NCBIP:70333)

Query Match 37.0%; Score 10; DB 2; Length 5;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 GL 4

||

Db 4 GL 5

RESULT 8

144817

27.5K structural protein - Leuconostoc oenos phase P37 (fragment)

C;Species: Leuconostoc oenos phase P37

C;Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998

C;Accession: I44817

R;Arendt, E.K.; Lonvaud, A.; Hammes, W.P.

J. Gen. Microbiol. 137, 2135-2139, 1991

A;Title: Lysozyme in Leuconostoc oenos.

A;Reference number: A44817; MUID:92085033; PMID:1748868

A;Accession: I44817

A;Molecule type: protein

A;Residues: 1-5 &lt;ARE&gt;

A;Note: sequence extracted from NCBI backbone (NCBIP:70330)

Query Match 37.0%; Score 10; DB 2; Length 5;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 GL 4

||

Db 3 GL 4

QY 3 GL 4  
Db 4 GL 5

RESULT 9  
E44817  
27.5K structural protein - Leuconostoc oenos phase P54 (fragment)  
C:Species: Leuconostoc oenos phase P54  
C>Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C:Accession: E44817  
R:Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A:Title: Lysogeny in Leuconostoc oenos.  
A:Reference number: A44817; MUID:92085033; PMID:1748868  
A:Accession: E44817  
A:Molecule type: protein  
A:Residues: 1-5 <ARE>  
A>Note: sequence extracted from NCBI backbone (NCBIP:70336)

Query Match 37.0%; Score 10; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4  
Db 4 GL 5

RESULT 10  
C44817  
28.5K structural protein - Leuconostoc oenos phase PAT5-12 (fragment)  
C:Species: Leuconostoc oenos phase PAT5-12  
C>Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C:Accession: C44817  
R:Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A:Title: Lysogeny in Leuconostoc oenos.  
A:Reference number: A44817; MUID:92085033; PMID:1748868  
A:Accession: C44817  
A:Molecule type: protein  
A:Residues: 1-5 <ARE>  
A>Note: sequence extracted from NCBI backbone (NCBIP:70341)

Query Match 37.0%; Score 10; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4  
Db 4 GL 5

RESULT 11  
A44817  
28K structural protein - Leuconostoc oenos phase PZtl1-15 (fragment)  
C:Species: Leuconostoc oenos phase PZtl1-15  
C>Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C:Accession: A44817  
R:Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A:Title: Lysogeny in Leuconostoc oenos.  
A:Reference number: A44817; MUID:92085033; PMID:1748868  
A:Accession: A44817  
A:Molecule type: protein  
A:Residues: 1-5 <ARE>  
A>Note: sequence extracted from NCBI backbone (NCBIP:70343)

Query Match 37.0%; Score 10; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4

Db 4 GL 5

RESULT 12  
S68328  
blood cell protein A - Molgula manhattensis (fragment)  
C:Species: Molgula manhattensis  
C>Date: 15-Jun-2001 #sequence\_revision 15-Jun-2001 #text\_change 15-Jun-2001  
C:Accession: S68328  
R:Taylor, S.W.; Ross, M.M.; Waite, J.H.  
Arch. Biochem. Biophys. 324, 228-240, 1995  
A:Title: Novel 3,4-di- and 3,4,5-trihydroxyphenylalanine-containing polypeptides from the  
A:Reference number: S68325; MUID:96132650; PMID:8554314  
A:Accession: S68328  
A:Molecule type: protein  
A:Residues: 1-3 <RAY>

Query Match 33.3%; Score 9; DB 3; Length 3;  
Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FF 2  
Db 2 FY 3

RESULT 13  
A32516  
cholecystokinin-5 - dog  
N:Alternate names: CCK-5  
C:Species: Canis lupus familiaris (dog)  
C>Date: 18-Oct-1989 #sequence\_revision 18-Oct-1989 #text\_change 18-Aug-2000  
C:Accession: A32516  
R:Shively, J.; Reeve Jr., J.R.; Eysselein, V.E.; Ben-Avram, C.; Vigna, S.R.; Walsh, J.H.  
Am. J. Physiol. 252, G272-G275, 1987  
A:Title: CCK-5: sequence analysis of a small cholecystokinin from canine brain and intest  
A:Reference number: A32516; MUID:87153871; PMID:3826354  
A:Accession: A32516  
A:Molecule type: protein  
A:Residues: 1-5 <SHI>  
C:Comment: This peptide  
C:Superfamily: gastrin  
C:Keywords: amidated carboxyl end; neuropeptide  
F:5/Modified site: amidated carboxyl end (Phe) #status experimental

Query Match 33.3%; Score 9; DB 2; Length 5;  
Best Local Similarity 66.7%; Pred. No. 2.8e+05;  
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GLM 5  
Db 1 GWM 3

RESULT 14  
PQ0689  
photosystem I 10.4K H1 chain - common tobacco (fragment)  
C:Species: Nicotiana tabacum (common tobacco)  
C>Date: 19-May-1994 #sequence\_revision 19-May-1994 #text\_change 17-Mar-1999  
C:Accession: PQ0689  
R:Obokata, J.; Mikami, K.; Hayashida, N.; Nakamura, M.; Sugiyura, M.  
Plant Physiol. 102, 1259-1267, 1993  
A:Title: Molecular heterogeneity of photosystem I. psal, psalE, psalF, psalH and psalL are a  
A:Reference number: PQ0667; MUID:94105345; PMID:8278548  
A:Accession: PQ0689  
A:Molecule type: protein  
A:Residues: 1-5 <OEO>  
C:Keywords: chloroplast; photosynthesis; photosystem I; thylakoid

Query Match 33.3%; Score 9; DB 2; Length 5;  
Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 FG 3  
:|  
Db 2 YG 3

## RESULT 15

B61445  
Leu-enkephalin - blue mussel  
C:Species: Mytilus edulis (blue mussel)  
C:Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 21-Jan-2000  
C:Accession: B61445  
R:Leung, M.K.; Stefano, G.B.  
Proc. Natl. Acad. Sci. U.S.A. 81, 955-958, 1984  
A:Title: Isolation and identification of enkephalins in pedal ganglia of Mytilus edulis  
A:Reference number: A61445; MUID:84144823; PMID:6583690  
A:Accession: B61445  
A:Molecule type: protein  
A:Residues: 1-5 <LEU>  
A:Experimental source: pedal ganglia  
C:Keywords: neuropeptide; opioid peptide

Query Match 33.3%; Score 9; DB 2; Length 5;  
Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 FG 3  
:|  
Db 1 YG 2

Search completed: March 23, 2005, 14:51:53  
Job time : 25.5 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 23, 2005, 14:21:29 ; Search time 112.5 Seconds  
(without alignments)  
22.759 Million cell updates/sec

Title: SEQ1

Perfect score: 27

Sequence: 1 ffglm 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 53

Minimum DB seq length: 0

Maximum DB seq length: 5

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt\_03.\*

1: uniprot\_sprot.\*

2: uniprot\_trembl.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	16	59.3	5	AL14_CARMA	P81817 carcinus ma
2	12	44.4	4	FFKA_ATEL	P58705 anthopleura
3	12	44.4	4	OCPI_OCTMI	P58648 octopus min
4	12	44.4	5	PAP2_PARMA	P81864 pardachirus
5	12	44.4	5	RE11_LITRU	P82070 litoria rub
6	12	44.4	5	RE21_LITRU	P82071 litoria rub
7	12	44.4	5	RE31_LITRU	P82072 litoria rub
8	12	44.4	5	RE32_LITRU	P82073 litoria rub
9	12	44.4	5	UC22_MAIZE	P80628 zea mays (m
10	11	40.7	5	TPIS_CANFA	P54714 canis fami
11	9	33.3	4	FYRI_ATEL	P58706 anthopleura
12	9	33.3	4	ILME_SEPOF	P83568 sepia offic
13	7	25.9	5	UF01_MOUSE	P38639 mus musculu
14	6	22.2	2	GWA_SEPOF	P83570 sepia offic
15	6	22.2	3	GRWV_HUMAN	P01157 homo sapien
16	6	22.2	4	ACH1_ACHFV	P35904 achatina fu
17	6	22.2	4	DCML_PSECH	P19916 pseudomonas
18	6	22.2	4	EOSI_HUMAN	P02731 homo sapien
19	6	22.2	4	FAR3_HIRME	P42562 hirudo medi
20	6	22.2	4	FAR4_HIRME	P42563 hirudo medi
21	6	22.2	4	FLRF_HIRME	P42561 hirudo medi
22	6	22.2	4	FLRN_ATEL	P58707 anthopleura
23	6	22.2	4	FMRF_VACNI	P01162 macrocallis
24	6	22.2	4	OCPI_OCTMI	P58649 octopus min
25	6	22.2	4	Q16047	Q16047 homo sapien
26	6	22.2	5	AP21_EISFO	P84182 eisenia foe
27	6	22.2	5	EI03_LITRU	P82099 litoria rub
28	6	22.2	5	EI04_LITRU	P82100 litoria rub
29	6	22.2	5	FARP_ATTRR	P41853 artiopesthi
30	6	22.2	5	FARP_CHICK	P83308 gallus gall
31	6	22.2	5	SUGA_ACHDO	P19991 acheta dome

32	6	22.2	5	1	UXA4_CHLTR	P38005 chlamydia t
33	5	18.5	4	1	DCMS_PSECH	P19318 pseudomonas
34	5	18.5	4	2	Q96AT0	Q96AT0 homo sapien
35	5	18.5	5	1	BIOA_CITFR	P13071 citrobacter
36	5	18.5	5	1	BIOB_CITFR	P12997 citrobacter
37	5	18.5	5	2	Q99007	Q99007 hordeum vul
38	5	18.5	5	2	P83073	P83073 bacillus ce
39	4	14.8	4	2	Q08433	Q08433 rattus sp.
40	4	14.8	5	1	PRCT_CARMA	P67857 carcinus ma
41	4	14.8	5	1	PRCT_LIMPO	P67858 limulus pol
42	4	14.8	5	1	PRCT_PERRA	P67859 periplaneta
43	3	11.1	5	1	PSK_DAUCA	P58261 daucus caro
44	2	7.4	3	1	LUXE_VIBFI	P24272 vibrio fisc
45	1	3.7	4	1	YLM1_YEAST	P36515 saccharomyc

## ALIGNMENTS

### RESULT 1

AL14\_CARMA STANDARD; PRT; 5 AA.

ID AL14\_CARMA  
AC P81817;  
DT 30-MAY-2000 (Rel. 39, Created)  
DT 30-MAY-2000 (Rel. 39, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Carcinustatin 14.  
OS Carcinus maenas (Common shore crab) (Green crab).  
OC Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;  
OC Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;  
OC Eubrachyura; Portunioidea; Portunidae; Carcinus.  
OX NCBI\_TaxID=6759;  
RN [1]  
RP SEQUENCE.

RC TISSUE=Cerebral ganglion, and Thoracic ganglion;  
RX MEDLINE=98121193; PubMed=9461295;  
RA Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Jaros P.P.,  
RA Thorpe A.;  
RT "Isolation and identification of multiple neuropeptides of the  
allatostatin superfamily in the shore crab Carcinus maenas.";  
RL Eur. J. Biochem. 250:727-734(1997).  
CC -!- FUNCTION: May act as a neurotransmitter or neuromodulator.  
KW Amidation; Direct protein sequencing; Multigene family; Neuropeptide.  
FT MOD\_RES 5 Leucine amide (Potential).  
SQ SEQUENCE 5 AA; 586 MW; 672879D5AB300000 CRC64;

Query Match 59.3%; Score 16; DB 1; Length 5;  
Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGL 4  
Db |||  
3 FGL 5

### RESULT 2

FFKA\_ATEL STANDARD; PRT; 4 AA.

ID FFKA\_ATEL  
AC P58705;  
DT 28-FEB-2003 (Rel. 41, Created)  
DT 28-FEB-2003 (Rel. 41, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Antho-Kaamide.  
OS Anthopleura elegantissima (Sea anemone).  
OC Eukaryota; Metazoa; Cnidaria; Anthozoa; Zoantharia; Actiniaria;  
OC Nynanthaeae; Actiniidae; Anthopleura.  
OX NCBI\_TaxID=6110;  
RN [1]  
RP SEQUENCE.

RX MEDLINE=92028852; PubMed=1681803;

RA Notbaker H.-P., Rinehart K.L. Jr., Grimmelikhuijzen C.J.P.;  
RT "Isolation of L-3-phenyllactyl-Phe-Lys-Ala-NH2 (Antho-Kaamide), a

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RT novel neuropeptide from sea anemones."
RL Biochem. Biophys. Res. Commun. 179:1205-1211(1991).
RN [2]
RP FUNCTION.
RX MEDLINE=93391436; PubMed=8397415;
RA McFarlane I.D., Hudman D., Nothacker H.-P., Grimmelikhuijzen C.J.P.;
RT "The expansion behaviour of sea anemones may be coordinated by two
RT inhibitory neuropeptides, Antho-KAamide and Antho-Ramide."
RL Proc. R. Soc. Lond., B, Biol. Sci. 253:183-188(1993).
CC -!- FUNCTION: Inhibits spontaneous contractions in several muscle
CC groups. May be involved in the expansion phase of feeding
CC behaviour in sea anemones.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Neuron specific.
DR PIR: JQ1273; JQ1273.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD RES 1 1 3-phenyllactic acid.
FT MOD RES 4 4 Alanine amide.
SQ SEQUENCE 4 AA; 512 MW; 6DD339C9A0000000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FF 2
Db ||
1 FF 2

RESULT 3
OCPL OCTMI STANDARD; PRT; 4 AA.
AC P58648;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DE Cardiac active peptides Ocp-1/Ocp-2.
OS Octopus minor (Octopus).
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
OC Octopodiformes; Octopoda; Incirrata; Octopodidae; Octopus.
OX NCBI_TaxID=89766;
RN [1]
RP SEQUENCE, SYNTHESIS, MASS SPECTROMETRY, AND CHARACTERIZATION.
RC TISSUE=Brain;
RX MEDLINE=20336815; PubMed=10876044; DOI=10.1016/S0196-9781(00)00201-1;
RA Iwakoshi E., Hisada M., Minakata H.;
RT "Cardiac active peptides isolated from the brain of a Japanese octopus,
RL Octopus minor."
CC Peptides 21:623-630(2000).
CC -!- FUNCTION: Cardioactive; has both positive chronotropic and
CC inotropic effects on the heart. Ocp-2 is a 1000 time less active
CC than Ocp-1.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- PTM: Ocp-2 has L-Phe instead of D-Phe.
CC -!- MASS SPECTROMETRY: MW=395.2; METHOD=MALDI; RANGE=1-4; NOTE=Ref.1.
FT D-amino acid; Direct protein sequencing; Hormone.
KW MOD RES 2 2 D-phenylalanine (in form Ocp-1).
SQ SEQUENCE 4 AA; 394 MW; 6AA879C810000000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FG 3
Db ||
2 FG 3

RESULT 4
PAP2 PARMA
ID PAP2 PARMA STANDARD; PRT; 5 AA.
AC P81864;
DT 30-MAY-2000 (Rel. 39, Created)

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DT 30-MAY-2000 (Rel. 39, Last sequence update)
DE Pardaxin II (PXII) (Fragment).
OS Pardachirus marmoratus (Red sea moses sole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
OC Soleoidae; Soleidae; Pardachirus.
OX NCBI_TaxID=31087;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RX MEDLINE=87057369; PubMed=3782138;
RA Lazarovici P., Primor N., Loew L.M.;
RT "Purification and pore-forming activity of two hydrophobic
RT polypeptides from the secretion of the Red sea moses sole (Pardachirus
RT marmoratus).";
RL J. Biol. Chem. 261:16704-16713(1986).
CC -!- FUNCTION: Exhibits unusual shark repellent and surfactant
CC properties. Forms voltage-dependent, ion-permeable channels in
CC membranes. At high concentration causes cell membrane lysis.
CC -!- SUBUNIT: Monomer. In aqueous solution exists as a tetramer.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the pardaxin family.
KW Direct protein sequencing; Toxin.
FT NON TER 5 5
FT SEQUENCE 5 AA; 614 MW; 7769C9C9C8100000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FF 2
Db ||
2 FF 3

RESULT 5
RELI LITRU STANDARD; PRT; 5 AA.
AC P82070;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DE Rubellidin 1.1.
OS Litoria rubella (Desert tree frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE, AND MASS SPECTROMETRY.
RC TISSUE=Skin secretion;
RA Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
RA Tyler M.J., Wallace J.C.;
RT "The structure of new peptides from the Australian red tree frog
RT 'Litoria rubella'. The skin peptide profile as a probe for the study
RT of evolutionary trends of amphibians."
RL Aust. J. Chem. 49:955-963(1996).
CC -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC activity.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Expressed by the skin dorsal glands.
CC -!- MASS SPECTROMETRY: MW=598; METHOD=FAB; RANGE=1-5; NOTE=Ref.1.
KW Amphibian defense peptide; Direct protein sequencing.
SQ SEQUENCE 5 AA; 598 MW; 6DD9C9CAB2A00000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FF 2
Db ||

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Db          3 FF 4
Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 6
RE31_LITRU
ID RE21_LITRU STANDARD; PRT; 5 AA.
AC P82071;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Rubellidin 2.1.
OS Litoria rubella (Desert tree frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE, AND MASS SPECTROMETRY.
RC TISSUE=Skin secretion;
RA Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
RA Tyler M.J., Wallace J.C.;
RT "The structure of new peptides from the Australian red tree frog
RT 'Litoria rubella'. The skin peptide profile as a probe for the study
RT of evolutionary trends of amphibians.";
RL Aust. J. Chem. 49:955-963(1996).
CC -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC activity.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Expressed by the skin dorsal glands.
CC -!- MASS SPECTROMETRY: MW=626; METHOD=FAB; RANGE=1-5; NOTE=Ref.1.
KW Amphibian defense peptide; Direct protein sequencing.
SQ SEQUENCE 5 AA; 626 MW; 6DD9C9CB10300000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 FF 2
Db          3 FF 4

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 7
RE31_LITRU
ID RE31_LITRU STANDARD; PRT; 5 AA.
AC P82072;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Rubellidin 3.1.
OS Litoria rubella (Desert tree frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE, AND MASS SPECTROMETRY.
RC TISSUE=Skin secretion;
RA Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
RA Tyler M.J., Wallace J.C.;
RT "The structure of new peptides from the Australian red tree frog
RT 'Litoria rubella'. The skin peptide profile as a probe for the study
RT of evolutionary trends of amphibians.";
RL Aust. J. Chem. 49:955-963(1996).
CC -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC activity.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Expressed by the skin dorsal glands.
CC -!- MASS SPECTROMETRY: MW=655; METHOD=FAB; RANGE=1-5; NOTE=Ref.1.
KW Amidation; Amphibian defense peptide; Direct protein sequencing.
FT MOD RES 5 Threonine amide,
SQ SEQUENCE 5 AA; 655 MW; 71A9C9CB10300000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 FF 2
Db          3 FF 4

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 8
RE32_LITRU
ID RE32_LITRU STANDARD; PRT; 5 AA.
AC P82073;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Rubellidin 3.2.
OS Litoria rubella (Desert tree frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RA Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
RT "Peptides from the skin glands of the Australian buzzing tree frog
RT Litoria electrica. Comparison with the skin peptides from Litoria
RT rubella.";
RL Aust. J. Chem. 52:639-645(1999).
CC -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC activity.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Expressed by the skin dorsal glands.
KW Amphibian defense peptide; Direct protein sequencing.
SQ SEQUENCE 5 AA; 570 MW; 71A9C9CB2A000000 CRC64;

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy          1 FF 2
Db          3 FF 4

Query Match 44.4%; Score 12; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 9
UC22_MAIZE
ID UC22_MAIZE STANDARD; PRT; 5 AA.
AC P80628;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Unknown protein from 2D-PAGE of etiolated coleoptile (Spot 474)
DE (Fragment).
OS Zea mays (Maize).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC PACCAD clade; Panicoideae; Andropogoneae; Zea.
OX NCBI_TaxID=4577;
RN [1]
RP SEQUENCE.
RC TISSUE=Coleoptile;
RA Touzet P., Riccardi F., Morin C., Damerval C., Huet J.-C.,
RA Pernollet J.-C., Zivy M., de Vienne D.;
RT "The maize two dimensional gel protein database: towards an integrated
RT genome analysis program.";
RL Theor. Appl. Genet. 93:997-1005(1996).
CC -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC protein is: 6.1, its MW is: 30.4 kDa.
DR Maize-2DPAGE; P80628; COLEOPTILE.
DR MaizeDB; 123954; -.
KW Direct protein sequencing.

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QY 4 LM 5  
| |  
Db 2 LM 3

Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

## RESULT 13

UF01\_MOUSE  
ID UF01\_MOUSE STANDARD; PRT; 5 AA.  
AC P38639;  
DT 01-OCT-1994 (Rel. 30, Created)  
DT 01-OCT-1994 (Rel. 30, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Unknown protein from 2D-PAGE of fibroblasts (P19) (Fragment).  
OS Mus musculus (Mouse).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
OX NCBI\_TaxID=10090;  
RN [1]  
RP SEQUENCE.  
RX TISSUE=Fibroblast; PubMed=7523108;  
RA MEDLINE=95009907; Wichter L.L., He C., Selkirk J.K.;  
RT "Separation and sequencing of familial and novel murine proteins using  
RT preparative two-dimensional gel electrophoresis.";  
RL Electrophoresis 15:735-745(1994).  
CC -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown  
CC protein is: 6.6, its MW is: 19 kDa.  
KW Direct protein sequencing.  
FT NON TER 5  
SQ SEQUENCE 5 AA; 717 MW; 7364087043100000 CRC64;

Query Match 25.9%; Score 7; DB 1; Length 5;  
Best Local Similarity 33.3%; Pred. No. 1.6e+06;  
Matches 1; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 PFG 3  
: |  
Db 1 WIG 3

## RESULT 14

GWA\_SEPOF  
ID GWA\_SEPOF STANDARD; PRT; 2 AA.  
AC P83570;  
DT 29-MAR-2004 (Rel. 43, Created)  
DT 29-MAR-2004 (Rel. 43, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Neuropeptide Gwa.  
OS Sepia officinalis (Common cuttlefish).  
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Colecoidea; Neocoleoidea;  
OC Decapodiformes; Sepioidea; Sepiidae; Sepia.  
OX NCBI\_TaxID=6610;  
RN [1]  
RP SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND AMIDATION.  
RC TISSUE=Optic lobe;  
RX MEDLINE=98100358; PubMed=9437704; DOI=10.1016/S0196-9781(97)00241-6;  
RA Henry J., Favrel P., Boucaud-Camou E.;  
RT "Isolation and identification of a novel Ala-Pro-Gly-Trp-amide-related  
RT peptide inhibiting the motility of the mature oviduct in the  
RT cuttlefish, Sepia officinalis.";  
RL Peptides 18:1469-1474(1997).  
CC -!- FUNCTION: Regulatory neuropeptide with myotropic activity  
CC targeting the distal oviduct. Inhibits the motility of the oviduct  
CC by decreasing tonus, frequency and amplitude of contractions.  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- MASS SPECTROMETRY: MW=259.9; METHOD=WALDI; RANGE=1-2; NOTE=Ref.1.  
KW Amidation; Direct protein sequencing; Neuropeptide.  
FT MOD RES 2  
SQ SEQUENCE 2 AA; 261 MW; 7378100000000000 CRC64;

Query Match 22.2%; Score 6; DB 1; Length 2;  
Best Local Similarity 100.0%; Pred. No. 1.6e+06;

## RESULT 15

GRWM\_HUMAN  
ID GRWM\_HUMAN STANDARD; PRT; 3 AA.  
AC P01157;  
DT 21-JUL-1986 (Rel. 01, Created)  
DT 21-JUL-1986 (Rel. 01, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Growth-modulating peptide.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE.  
RX MEDLINE=77162369; PubMed=858356;  
RA Schlesinger D.H., Pickart L., Thaler M.M.;  
RT "Growth-modulating serum tripeptide is glycyl-histidyl-lysine.";  
RL Experientia 33:324-325(1977).  
CC -!- MISCELLANEOUS: This serum tripeptide has been found to stimulate  
CC growth of some cell types and to inhibit other types in vitro.  
DR GO:0001558; P:regulation of cell growth; NAS.  
KW Direct protein sequencing.  
SQ SEQUENCE 3 AA; 340 MW; 6331E81000000000 CRC64;

Query Match 22.2%; Score 6; DB 1; Length 3;  
Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 G 3  
|  
Db 1 G 1

Search completed: March 23, 2005, 14:49:56  
Job time : 117.5 secs



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: March 23, 2005, 15:19:16 ; Search time 68 Seconds  
(without alignments)  
28.438 Million cell updates/sec

Title: SEQ1

Perfect score: 27

Sequence: 1 ffglm 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 45841

Minimum DB seq length: 0

Maximum DB seq length: 5

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*

1: Genesep1980s:\*

2: Genesep1990s:\*

3: Genesep2000s:\*

4: Genesep2001s:\*

5: Genesep2002s:\*

6: Genesep2003as:\*

7: Genesep2003bs:\*

8: Genesep2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	27	100.0	5	2 AAR33009	Aar33009 Alpha-sub
2	27	100.0	5	2 AAR33008	Aar33008 Alpha-sub
3	27	100.0	5	2 AAR33007	Aar33007 Alpha-sub
4	27	100.0	5	2 AAR33010	Aar33010 Alpha-sub
5	27	100.0	5	2 AAR54549	Aar54549 Cholecyt
6	27	100.0	5	2 AAR54551	Aar54551 Cholecyt
7	27	100.0	5	2 AAR54550	Aar54550 Cholecyt
8	27	100.0	5	2 AAR54548	Aar54548 Cholecyt
9	27	100.0	5	2 AAW41687	Aaw41687 Tetrapt
10	27	100.0	5	2 AAW99643	Aaw99643 Substance
11	27	100.0	5	2 AAY50325	Aay50325 Neutroph
12	27	100.0	5	2 AAW92660	Aaw92660 Human tac
13	27	100.0	5	3 AAB23025	Aab23025 Human/rat
14	27	100.0	5	3 AAY67576	Aay67576 P antagonist
15	27	100.0	5	4 AAB91428	Aab91428 Tachykini
16	27	100.0	5	5 ABB10088	Abb10088 Substance
17	27	100.0	5	5 AAU77845	Aau77845 Tachykini
18	27	100.0	5	7 ADE94203	Ade94203 High acti
19	27	100.0	5	7 ADF92530	Adf92530 Substance
20	27	100.0	5	8 ADN95078	Adn95078 Mammalian
21	27	100.0	5	8 ADR43771	Adr43771 Human mag
22	24	88.9	5	2 AAW92702	Aaw92702 Human tac
23	24	88.9	5	5 ABB10089	Abb10089 Substance
24	24	88.9	5	7 ADE94204	Ade94204 High acti
25	22	81.5	5	2 AAR27697	Aar27697 Cyclic ta

26	22	81.5	5	2 AAW92703	Aaw92703 Human tac
27	22	81.5	5	2 AAW92701	Aaw92701 Human tac
28	21	77.8	4	2 AAW41683	Aaw41683 Peptide u
29	21	77.8	4	2 AAY31075	Aay31075 Non-cross
30	21	77.8	4	3 AAB23026	Aab23026 Human/rat
31	21	77.8	4	3 AAY67577	Aay67577 P antagonist
32	21	77.8	4	4 AAB91447	Aab91447 Tachykini
33	21	77.8	4	5 ABB10091	Abb10091 Substance
34	21	77.8	4	5 AAU77846	Aau77846 Tachykini
35	21	77.8	4	7 ADE94198	Ade94198 High acti
36	21	77.8	4	8 ADR43772	Adr43772 Human mag
37	21	77.8	5	4 AAB91389	Aab91389 Tachykini
38	21	77.8	5	5 ABB10090	Abb10090 Substance
39	21	77.8	5	6 AAE35975	Aae35975 Zea mays
40	21	77.8	5	7 ADE94205	Ade94205 High acti
41	21	77.8	5	8 ADR03603	Adr03603 E. coli m
42	20	74.1	5	2 AAW80134	Aaw80134 COOH-term
43	20	74.1	5	2 AAR41695	Aar41695 GHRP-6 (G
44	20	74.1	5	2 AAR47524	Aar47524 GHRP-6 an
45	20	74.1	5	2 AAW13221	Aaw13221 Growth ho

#### ALIGNMENTS

#### RESULT 1

AAR33009  
ID AAR33009 standard; peptide; 5 AA.

XX AAR33009;

DT 25-MAR-2003 (revised)

DT 02-APR-1993 (first entry)

XX Alpha-substituted short peptide.

XX CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;

KW improved bioavailability.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 4 /note= "alpha-Me-Leu"

FT Modified-site 5 /note= "Met-NH2"

FT Modified-site 5 /note= "Met-NH2"

XX WO9219254-A1.

XX 12-NOV-1992.

XX 15-APR-1992; 92WO-US003119.

XX 24-APR-1991; 91US-00690755.

XX 20-MAR-1992; 92US-00852086.

XX (WARN ) WARNER LAMBERT CO.

XX Horwell DC, Hughes J, Richardson RS, Howson W;

XX WPI; 1992-398522/48.

XX New alpha-subst. polypeptide are e.g. selective receptor ligands - for treating inflammation, pain, stroke, ulcers, hypertension, heart failure, depression, cancer, asthma, psychosis, arthritis, etc.

XX Claim 3; Page 41; 46pp; English.

XX The peptide is a specifically claimed example of a group of generically claimed mono-, di-, tri-, tetra- and penta-peptides which include a substituent on an alpha-C atom in the chain. Such substitution may modify the bioavailability, stability or absorbability of the peptide and hence may improve the activity of the peptide as a drug. Depending on the

CC nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
 CC peptide, etc.), the modified peptides are variously useful for treating  
 CC obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
 CC addictive drug withdrawal symptoms, hypertension, heart failure,  
 CC cognition or memory disorders, spasticity, depression, diabetes, cancer,  
 CC asthma, bladder dysfunction, psychosis and arthritis; and as  
 CC contraceptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 5 AA;

Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFGLM 5  
 Db 1 FFGLM 5

## RESULT 2

AAR33008

ID AAR33008 standard; peptide; 5 AA.

AC AAR33008;

XX 25-MAR-2003 (revised)

DT 02-APR-1993 (first entry)

XX Alpha-substituted short peptide.

DE CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;

XX improved bioavailability.

KW Synthetic.

OS Key

XX Modified-site 2

FT Location/Qualifiers

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

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FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

CC cognition or memory disorders, spasticity, depression, diabetes, cancer,  
 CC asthma, bladder dysfunction, psychosis and arthritis; and as  
 CC contraceptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 5 AA;

Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFGLM 5  
 Db 1 FFGLM 5

## RESULT 3

AAR33007

ID AAR33007 standard; peptide; 5 AA.

AC AAR33007;

XX 25-MAR-2003 (revised)

DT 02-APR-1993 (first entry)

XX Alpha-substituted short peptide.

DE CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;

XX improved bioavailability.

KW Synthetic.

OS Key

XX Modified-site 1

FT Location/Qualifiers

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

FT Modified-site 5

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FT Modified-site 5

FT Modified-site 5

The peptide is a specifically claimed example of a group of generically  
 claimed mono-, di-, tri-, tetra- and penta-peptides which include a  
 substituent on an alpha-C atom in the chain. Such substitution may modify  
 the bioavailability, stability or absorbability of the peptide and hence  
 may improve the activity of the peptide as a drug. Depending on the  
 nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
 peptide, etc.), the modified peptides are variously useful for treating  
 obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
 addictive drug withdrawal symptoms, hypertension, heart failure,  
 cognition or memory disorders, spasticity, depression, diabetes, cancer,  
 asthma, bladder dysfunction, psychosis and arthritis; and as  
 CC contraceptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR

CC field.) (Updated on 25-MAR-2003 to correct PI field.)

SQ Sequence 5 AA;

Query Match 100.0%; Score 27; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PFGLM 5  
DB 1 PFGLM 5

RESULT 4

AAR33010  
ID AAR33010 standard; peptide; 5 AA.

XX AC AAR33010;

XX DT 25-MAR-2003 (revised)

XX DT 02-APR-1993 (first entry)

XX DE Alpha-substituted short peptide.

XX KW CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;  
XX KW improved bioavailability.

XX OS Synthetic.

XX FH Key Location/Qualifiers

XX FT Modified-site 5 /note= "alpha-Me-Met-NH2"

XX PN WO9219254-A1.

XX PD 12-NOV-1992.

XX PF 15-APR-1992; 92WO-US003119.

XX PR 24-APR-1991; 91US-00690755.

XX PR 20-MAR-1992; 92US-00852086.

XX PA (WARN ) WARNER LAMBERT CO.

XX PI Horwell DC, Hughes J, Richardson RS, Howson W;

XX DR WPI; 1992-398522/48.

XX PT New alpha-substd. polypeptide are e.g. selective receptor ligands - for  
PT treating inflammation, pain, stroke, ulcers, hypertension, heart failure,  
PT depression, cancer, asthma, psychosis, arthritis, etc.

XX PS Claim 3; Page 41; 46pp; English.

XX CC The peptide is a specifically claimed example of a group of generically  
CC claimed mono-, di-, tri-, tetra- and penta-peptides which include a  
CC substituent on an alpha-C atom in the chain. Such substitution may modify  
CC the bioavailability, stability or absorbability of the peptide and hence  
CC may improve the activity of the peptide as a drug. Depending on the  
CC nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
CC peptide, etc.), the modified peptides are variously useful for treating  
CC obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
CC addictive drug withdrawal symptoms, hypertension, heart failure,  
CC cognition or memory disorders, spasticity, depression, diabetes, cancer,  
CC asthma, bladder dysfunction, psychosis and arthritis; and as  
CC contraceptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 5 AA;

Query Match

Best Local Similarity 100.0%; Score 27; DB 2; Length 5;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PFGLM 5

DB 1 PFGLM 5

RESULT 5

AAR54549  
ID AAR54549 standard; peptide; 5 AA.

XX AC AAR54549;

XX DT 25-MAR-2003 (revised)

XX DT 14-DEC-1994 (first entry)

XX DE Cholecystokinin analogue peptide #42.

XX KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;  
XX KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;  
XX KW heart failure; cognition; memory enhancement; spasticity; depression;  
XX KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.  
XX OS Synthetic.

XX FH Key Location/Qualifiers

XX FT Modified-site 2 /label= Mephe

XX FT Modified-site 5 /note= "Amidated C-terminal"

XX PN WO9409031-A1.

XX PD 28-APR-1994.

XX PF 14-OCT-1993; 93WO-US009809.

XX PR 19-OCT-1992; 92US-00963169.

XX PR 08-OCT-1993; 93US-00131693.

XX PA (WARN ) WARNER LAMBERT CO.

XX PI Horwell DC, Howson W, Hugues J, Richardson RS;

XX DR WPI; 1994-151243/18.

XX PT New cholecystokinin analogues - useful e.g. in treatment of pain,  
PT obesity, stroke, anxiety, and gastrointestinal ulcers.

XX PS Claim 3; Page 66; 73pp; English.

XX CC The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues  
CC of cholecystokinin (CCK) which can be used to treat obesity, anxiety,  
CC gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart  
CC failure, cognition, memory enhancement, spasticity, depression, diabetes,  
CC cancers, asthma, bladder dysfunction, psychosis, arthritis and in the  
CC treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN  
CC field.)

XX Sequence 5 AA;

Query Match

Best Local Similarity 100.0%; Score 27; DB 2; Length 5;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PFGLM 5

DB 1 PFGLM 5

RESULT 6

AAR54551  
ID AAR54551 standard; peptide; 5 AA.

```

XX AC AAR54551;
XX DT 25-MAR-2003 (revised)
XX DT 14-DEC-1994 (first entry)
XX DE Cholecystokinin analogue peptide #44.
XX KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;
XX KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;
XX KW heart failure; cognition; memory enhancement; spasticity; depression;
XX KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 5
XX FT /label= MeMet
XX FT /note= "Amidated C-terminal"
XX PN WO9409031-A1.
XX PD 28-APR-1994.
XX PF 14-OCT-1993; 93WO-US009809.
XX PR 19-OCT-1992; 92US-00963169.
XX PR 08-OCT-1993; 93US-00131693.
XX PA (WARN ) WARNER LAMBERT CO.
XX PI Horwell DC, Howson W, Hugues J, Richardson RS;
XX WPI; 1994-151243/18.
XX DR New cholecystokinin analogues - useful e.g. in treatment of pain,
XX PT obesity, stroke, anxiety, and gastrointestinal ulcers.
XX PS Claim 3; Page 66; 73pp; English.
XX CC The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues
XX CC of cholecystokinin (CCK) which can be used to treat obesity, anxiety,
XX CC gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart
XX CC failure, cognition, memory enhancement, spasticity, depression, diabetes,
XX CC cancers, asthma, bladder dysfunction, psychosis, arthritis and in the
XX CC treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 5 AA;
XX Query Match 100.0%; Score 27; DB 2; Length 5;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+06;
XX Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 PFGLM 5
Db 1 PFGLM 5
RESULT 7
AAR54550
ID AAR54550 standard; peptide; 5 AA.
XX AC AAR54550;
XX DT 25-MAR-2003 (revised)
XX DT 14-DEC-1994 (first entry)
XX DE Cholecystokinin analogue peptide #43.
XX KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;
XX KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;
XX KW heart failure; cognition; memory enhancement; spasticity; depression;
XX KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 1
XX FT /label= MePhe
XX FT Modified-site 5
XX FT /note= "Amidated C-terminal"

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```

KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.
XX Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 3
XX FT /label= MeLeu
XX FT Modified-site 5
XX FT /note= "Amidated C-terminal"
XX PN WO9409031-A1.
XX PD 28-APR-1994.
XX PF 14-OCT-1993; 93WO-US009809.
XX PR 19-OCT-1992; 92US-00963169.
XX PR 08-OCT-1993; 93US-00131693.
XX PA (WARN ) WARNER LAMBERT CO.
XX PI Horwell DC, Howson W, Hugues J, Richardson RS;
XX WPI; 1994-151243/18.
XX DR New cholecystokinin analogues - useful e.g. in treatment of pain,
XX PT obesity, stroke, anxiety, and gastrointestinal ulcers.
XX PS Claim 3; Page 66; 73pp; English.
XX CC The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues
XX CC of cholecystokinin (CCK) which can be used to treat obesity, anxiety,
XX CC gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart
XX CC failure, cognition, memory enhancement, spasticity, depression, diabetes,
XX CC cancers, asthma, bladder dysfunction, psychosis, arthritis and in the
XX CC treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 5 AA;
XX Query Match 100.0%; Score 27; DB 2; Length 5;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+06;
XX Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 PFGLM 5
Db 1 PFGLM 5
RESULT 8
AAR54548
ID AAR54548 standard; peptide; 5 AA.
XX AC AAR54548;
XX DT 25-MAR-2003 (revised)
XX DT 14-DEC-1994 (first entry)
XX DE Cholecystokinin analogue peptide #41.
XX KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;
XX KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;
XX KW heart failure; cognition; memory enhancement; spasticity; depression;
XX KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 1
XX FT /label= MePhe
XX FT Modified-site 5
XX FT /note= "Amidated C-terminal"

```



PN WO9409031-A1.  
 XX 28-APR-1994.  
 PD  
 PF 14-OCT-1993; 93WO-US009809.  
 XX  
 CC 19-OCT-1992; 92US-00963169.  
 PR  
 CC 08-OCT-1993; 93US-00131693.  
 XX  
 PA (WARN ) WARNER LAMBERT CO.  
 XX  
 PI Horwell DC, Howson W, Hugues J, Richardson RS;  
 XX WPI; 1994-151243/18.  
 DR  
 XX New cholecystokinin analogues - useful e.g. in treatment of pain,  
 PT obesity, stroke, anxiety, and gastrointestinal ulcers.  
 XX  
 PS Claim 3; Page 66; 73pp; English.  
 XX  
 CC The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues  
 CC of cholecystokinin (CCK) which can be used to treat obesity, anxiety,  
 CC gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart  
 CC failure, cognition, memory enhancement, spasticity, depression, diabetes,  
 CC cancers, asthma, bladder dysfunction, psychosis, arthritis and in the  
 CC treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX  
 SQ Sequence 5 AA;  
 Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 PFGLM 5  
 DB |||||  
 1 PFGLM 5  
 RESULT 9  
 AAW41687  
 ID AAW41687 standard; peptide; 5 AA.  
 XX  
 AC AAW41687;  
 XX  
 DT 09-JUN-1998 (first entry)  
 XX  
 DE Tetrapeptide #4.  
 XX  
 KW Ophthalmic drug; corneal disorder; ulcer; epithelial peeling; dry eye;  
 KW keratitis; insulin like growth factor-I; IGF-I; eye drop.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 5 /note= "C-terminal amide"  
 FT  
 XX WO9749419-A1.  
 PN  
 XX 31-DEC-1997.  
 PD  
 XX 11-JUN-1997; 97WO-JP002015.  
 PF  
 XX 26-JUN-1996; 96JP-00165612.  
 PR  
 XX (SANT ) SANTEN PHARM CO LTD.  
 PA  
 XX Nishida T, Nakamura M, Nakata K;  
 PI WPI; 1998-076907/07.  
 DR  
 XX Ophthalmic drug composition containing tetra:peptide - is useful as

PT corneal disorder remedy for corneal ulcer, corneal epithelial peeling,  
 PT dry eye, keratitis.  
 XX  
 PS Disclosure; Page 11; 19pp; Japanese.  
 XX  
 CC This sequence is shown in the specification. The invention relates to an  
 CC ophthalmic drug composition which contains phe-Gly-Leu-Mat-NH2 or its  
 CC medicinally acceptable salts as the active ingredient. It is used,  
 CC together with insulin like growth factor-I (IGF-I), to treat corneal  
 CC disorders such as corneal ulcer, corneal epithelial peeling, dry eye and  
 CC keratitis. The dosage is 0.1-5000 (preferably 1-1000) mg/day of the  
 CC active ingredient and 0.001-100 (preferably 0.01-10) mg/day of IGF-I. The  
 CC preferable form of the composition is eye drops  
 XX  
 SQ Sequence 5 AA;  
 Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1 PFGLM 5  
 DB |||||  
 1 PFGLM 5  
 RESULT 10  
 AAW99643  
 ID AAW99643 standard; peptide; 5 AA.  
 XX  
 AC AAW99643;  
 XX  
 DT 21-MAY-1999 (first entry)  
 XX  
 DE Substance P analogue peptide.  
 XX  
 KW Substance P; myoblast transfer therapy; pain relief; analgesic;  
 KW behavioural abnormality; perceptive abnormality; opioid receptor;  
 KW psychiatric condition; depression; chronic anxiety syndrome; paranoia;  
 KW alcoholism; drug addiction; chronic pain; neuron.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN EP898967-A1.  
 XX  
 PD 03-MAR-1999.  
 XX  
 PF 07-APR-1998; 98EP-00201068.  
 XX  
 PR 11-AUG-1997; 97US-0055199P.  
 XX  
 PA (CELL-) CELL THERAPY RES FOUND.  
 XX  
 PI Law PK;  
 XX  
 DR WPI; 1999-144555/13.  
 XX  
 PT New composition for supplying peptide to opioid receptor - comprises  
 PT myogenic cells containing heterologous DNA encoding peptide and carrier.  
 XX  
 PS Claim 8; Page 8; 11pp; English.  
 XX  
 CC A composition has been developed for supplying a peptide to an opioid  
 CC receptor or that interferes with binding of substance P to its receptor.  
 CC The composition comprises: (a) myogenic cells that contain heterologous  
 CC DNA encoding the peptide to express the peptide; and (b) a  
 CC pharmaceutically acceptable carrier. The composition is useful for  
 CC relieving pain and for treating behavioural and perceptual abnormalities  
 CC using myoblast transfer therapy. It is useful in a method for treating  
 CC psychiatric conditions that involve abnormal perception e.g. depression,  
 CC chronic anxiety syndromes, paranoia, alcoholism and drug addiction,  
 CC chronic pain and other diseases in which opioid neurons and substance P  
 CC sensitive neurons play a role. The composition provides a continuous,

CC long term supply of opioid peptides (long-term analgesia) which lasts for  
 CC up to at least 6 years. The present sequence represents a specifically  
 CC claimed substance P analogue  
 XX  
 SQ Sequence 5 AA;

Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFGLM 5  
 DB 1 FFGLM 5

RESULT 11  
 AAY50325  
 ID AAY50325 standard; peptide; 5 AA.  
 XX  
 AC AAY50325;

XX 12-JAN-2000 (first entry)

XX Neurophil-activating pancreatic derived peptide 125.

XX Cell activation; pancreas; treatment; cardiovascular disease; trauma;  
 KW inflammatory disease; autoimmune diseases; arthritis; diabetes; stroke;  
 KW organ rejection; ischemia; Alzheimer's disease; myocardial infarction;  
 KW haemorrhagic shock; diabetic retinopathy; venous insufficiency; angina;  
 KW trauma; protease inhibitor; hypertension; sepsis.

XX Unidentified.

XX WO9946367-A2.

XX 16-SEP-1999.

XX 11-MAR-1999; 99WO-US005247.

XX 11-MAR-1998; 98US-00038894.

XX (CELL-) CELL ACTIVATION INC.

XX (REGC ) UNIV CALIFORNIA.

XX (SCRI ) SCRIPPS RES INST.

XX Stoughton RB, Schmid-Schonbein GW, Hugli TE, Kistler E;  
 DR WPI; 1999-580234/49.

XX

PT Use of cell activating compositions in developing products for diagnosis  
 PT and treatment of e.g. cardiovascular, inflammatory, autoimmune or  
 PT Alzheimer's disease, trauma, arthritis, organ rejection, diabetes, stroke  
 PT or ischemia.

XX Example 9; Page 184; 184pp; English.

XX This invention describes a novel method for the use and preparation of  
 CC cell activating compositions which involves preparing a cell activating  
 CC composition comprising (a) homogenizing pancreatic tissue in buffer at  
 CC about neutral or higher pH to produce a homogenate; (b) removing  
 CC particulates from the homogenate; (c) optionally incubating the resulting  
 CC homogenate, with particulates removed, with a protease; and (d)  
 CC fractionating the homogenate and selecting fractions that exhibit cell  
 CC activation activity. The methods can be used for improving treatment  
 CC outcome or reducing risk of treatment of e.g. cardiovascular disease,  
 CC inflammatory disease, trauma, autoimmune diseases, arthritis, organ  
 CC rejection, diabetes and diabetic complications, stroke, ischemia,  
 CC Alzheimer's disease, myocardial infarction, haemorrhagic shock, diabetic  
 CC retinopathy, diabetes, venous insufficiency, unstable angina or trauma.  
 CC They can be used in the veterinary treatment of a non-human subject.  
 CC Protease inhibitors can be used to lower cell activation resulting from  
 CC these diseases and deficiencies. The detection of an elevated level of  
 CC hydrogen peroxide can be used to detect an inflammatory condition. An

CC elevated level of hydrogen peroxide in plasma or whole blood and in the  
 CC presence of superoxide dismutase (SOD) indicates leukocyte up regulation,  
 CC e.g. indicative of the onset of an acute cardiovascular disorders, such  
 CC as disease onset or ischemic complications. An elevated level of hydrogen  
 CC peroxide in plasma or whole blood and a low level in the presence of SOD  
 CC is indicative of a chronic or immune compromised condition e.g.  
 CC hypertension or sepsis. AAY50201-Y50334 represent peptides used in the  
 CC method of the invention

XX Sequence 5 AA;

Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFGLM 5  
 DB 1 FFGLM 5

RESULT 12  
 AAW92660

ID AAW92660 standard; peptide; 5 AA.

XX AC AAW92660;

XX 20-MAR-2003 (revised)

XX 30-APR-1999 (first entry)

XX Human tachykinin agonist beta-amyloid peptide fragment #6.

XX Tachykinin agonist; beta-amyloid; inhibition; neurotoxin; treatment;  
 KW Alzheimer's disease; Down's syndrome; amyloidosis; human;  
 KW hereditary cerebral haemorrhage; non-inherited congenital angiopathy.

XX Homo sapiens.

XX US5876948-A.

XX 02-MAR-1999.

XX 29-JUL-1991; 91US-00737371.

XX 27-JUL-1990; 90US-00559173.

XX (CHIL-) CHILDRENS MEDICAL CENT.

XX Yankner BA;

XX WPI; 1999-189630/16.

PT Screening for neurotoxin inhibitors - by testing compounds for their  
 PT effect on beta-amyloid peptide neurotoxic effect on neuronal cells.

XX Disclosure; Col 13-14; 28pp; English.

XX This invention describes a method for screening compounds for inhibiting  
 CC a neurotoxin. The method involves incubating tachykinin agonists with  
 CC neuronal cells and a beta-amyloid peptide neurotoxin. The methods can be  
 CC used for identifying compounds for treating diseases characterised by an  
 CC undesirable build up of beta-amyloid protein, e.g. Alzheimer's disease,  
 CC Down's syndrome, and the syndromes of hereditary cerebral haemorrhage  
 CC with amyloidosis, and non-inherited congenital angiopathy with cerebral  
 CC haemorrhage. AAW92655-W92731 are tachykinin agonists derived from human  
 CC beta-amyloid peptide fragments. (Updated on 20-MAR-2003 to correct PF  
 CC field.)

XX Sequence 5 AA;

Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 FFGLM 5
Db      1 FFGLM 5

RESULT 13
AAB23025
ID AAB23025 standard; peptide; 5 AA.
XX
AC AAB23025;
XX
XX 16-JAN-2001 (first entry)
XX
XX Human/rat tachykinin Substance P C-terminal pentapeptide.
XX
XX Substance P; tachykinin; human; rat; magnesium binding defect;
KW sodium sensitive essential hypertension; insulin resistance;
KW type 2 diabetes; antibody; immunoassay; quantification.
XX
OS Homo sapiens.
OS Rattus sp.
XX
XX Key Location/Qualifiers
FH Modified-site 5
FT /note= "C-terminal amide"
FT
XX WO200054053-A1.
XX
XX 14-SEP-2000.
XX
XX 09-MAR-2000; 2000WO-US003707.
XX
XX 10-MAR-1999; 99US-00265690.
XX (WELL/) WELLS I C.
XX Wells IC;
PI
XX WPI; 2000-587457/55.
XX
XX Detecting magnesium binding defects associated with abnormal
PT physiological states such as sodium-sensitive essential hypertension and
PT type 2 insulin-resistant diabetes mellitus, comprises measuring a
PT specific pentapeptide in blood.
XX
XX Disclosure; Page 5; 21pp; English.
XX
XX The invention relates to a method for detecting magnesium binding
CC defects. The method comprises quantitating a tachykinin C-terminal
CC pentapeptide (e.g., AAB23025) and its degradation products (e.g.,
CC AAB23026) in blood using an antibody specific for the generalised
CC mammalian tachykinin C-terminal pentapeptide Phe-(Phe/Val)-Gly-Leu-Met-
CC NH2 (AAB23028). The method is useful for detecting cellular magnesium
CC binding defects which are associated with abnormal physiological states
CC such as sodium-sensitive essential hypertension and type 2 diabetes
CC mellitus. The present sequence represents the C-terminal 5 amino acids of
CC the tachykinin Substance P (AAB23027) from human and rat, which may be
CC assayed according to the method of the invention
XX
XX Sequence 5 AA;
SQ
Query Match 100.0%; Score 27; DB 3; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.8e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 FFGLM 5
Db      1 FFGLM 5

RESULT 14
AAY67576
ID AAY67576 standard; peptide; 5 AA.
XX
XX AAY67576;
XX
XX 19-MAY-2000 (first entry)
XX
XX P antagonist peptide #4.
XX
XX Pharmaceutical; veterinary; gonadotropin-releasing hormone; GnRH;
KW pore-forming agent; lecithin; stearin; P antagonist.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
FH Modified-site 5
FT /note= "C-terminal amide"
FT
XX WO200004897-A1.
XX
XX 03-FEB-2000.
XX
XX 20-JUL-1999; 99WO-AU000585.
XX
XX 20-JUL-1998; 98AU-00004730.
PR 20-JUL-1998; 98AU-00004731.
PR 13-MAY-1999; 99AU-00000324.
XX
XX (PEPT-) PEPTECH LTD.
XX
XX Trigg TE, Walsh JD, Rathjen DA;
XX
XX WPI; 2000-182528/16.
XX
XX Bioimplant formulation for sustained delivery of an active agent over 7
PT days to 2 years, comprises active agent, pore-forming agent and stearin.
XX
XX Claim 20; Page 21; 37pp; English.
XX
XX The invention provides a pharmaceutical and/or veterinary formulation
CC that comprises 2 -30% of active agents which include a gonadotropin-
CC releasing hormone (GnRH) agonist, 0.5 - 20% of a pore-forming agent which
CC is not lecithin, and the remainder stearin. The formulation is useful as
CC a sustained release implant which can deliver the active agent for a
CC period of 7 days to 2 years. Sequences AAY67573-578 represent P
CC antagonist peptides used in the composition
XX
XX Sequence 5 AA;
SQ
Query Match 100.0%; Score 27; DB 3; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.8e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 FFGLM 5
Db      1 FFGLM 5

RESULT 15
AAB91428
ID AAB91428 standard; peptide; 5 AA.
XX
XX AAB91428;
XX
XX 22-JUN-2001 (first entry)
XX
XX Tachykinins peptide SEQ ID NO:604.
XX
XX Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW blood component; modification; succinimidy; maleimido group; amino;
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX

```

PN WO200069900-A2.  
 PD 23-NOV-2000.  
 XX  
 PF 17-MAY-2000; 2000WO-US013576.  
 XX  
 PR 17-MAY-1999; 99US-0134406P.  
 PR 10-SEP-1999; 99US-0153406P.  
 PR 15-OCT-1999; 99US-0159783P.  
 XX  
 PA (CONJ-) CONJUCHEM INC.  
 XX  
 XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;  
 PI WPI; 2001-112059/12.  
 XX  
 DR  
 XX  
 PT Modifying and attaching therapeutic peptides to albumin prevents  
 PT peptidase degradation, useful for increasing length of in vivo activity.  
 XX  
 PS Disclosure; Page 397; 733pp; English.  
 XX  
 CC The present invention describes a modified therapeutic peptide (I)  
 CC comprising a therapeutically active amino acid region (III) and a  
 CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity in  
 CC vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or  
 CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention  
 XX  
 XX Sequence 5 AA;  
 SQ

Query Match 100.0%; Score 27; DB 4; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFGLM 5  
 |||||  
 Db 1 FFGLM 5

RESULT 16  
 ABB10088  
 ID ABB10088 standard; peptide; 5 AA.  
 XX  
 AC ABB10088;  
 XX  
 DT 26-JUL-2002 (first entry)  
 XX  
 DE Substance P analog used in wound healing treatment#11.  
 XX  
 KW Wound healing; insulin-like growth factor-I; tear; abrasion; skin ulcer;  
 KW surgical incision; burn.  
 XX  
 XX Unidentified.  
 OS  
 XX  
 XX WO200213853-A1.  
 PN  
 XX  
 PD 21-FEB-2002.  
 XX  
 XX 10-AUG-2001; 2001WO-JP0069933.  
 PF  
 XX 10-AUG-2000; 2000JP-00242489.  
 PR  
 PR 28-NOV-2000; 2000JP-00361388.  
 XX

XX (SANT ) SANTEN PHARM CO LTD.  
 PA (NISH/) NISHIDA T.  
 XX  
 XX Nishida T, Nakata K, Nakamura M;  
 PI WPI; 2002-269153/31.  
 DR  
 XX  
 PT Skin wound healing promoters or skin epidermal extension promoters  
 PT containing substance P analogs and insulin-like growth factor-I for  
 PT treating wounds like tear, abrasion, surgical incision, skin ulcers or  
 PT burns.  
 XX  
 PS Disclosure; Page 4; 20pp; Japanese.  
 XX  
 CC The invention relates to skin wound healing promoters, containing  
 CC substance P analogs or their pharmaceutically-acceptable salts, and  
 CC insulin-like growth factor-I as the active ingredient. The promoters are  
 CC for treating wounds like tears, abrasions, surgical incisions, or skin  
 CC ulcers and burns. The current sequence represents a substance P analog  
 CC for use in wound healing treatment  
 XX  
 SQ Sequence 5 AA;  
 Query Match 100.0%; Score 27; DB 5; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFGLM 5  
 |||||  
 Db 1 FFGLM 5

RESULT 17  
 AAU77845  
 ID AAU77845 standard; peptide; 5 AA.  
 XX  
 AC AAU77845;  
 XX  
 DT 05-JUN-2002 (first entry)  
 XX  
 DE Tachykinin N -terminal pentapeptide.  
 XX  
 KW Tachykinin; substance P; hypertension; hypotensive; antidiabetic;  
 KW gynaecological; salt-insensitive hypertension; magnesium binding;  
 KW insulin resistance; type 2 diabetes mellitus; pre-eclampsia; eclampsia.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 5..5 /note= "C terminal-amide"  
 FT  
 XX  
 PN WO200211714-A2.  
 XX  
 PD 14-FEB-2002.  
 XX  
 XX 09-AUG-2001; 2001WO-US024909.  
 PF  
 XX 09-AUG-2000; 2000US-00635266.  
 PR  
 XX (MAGN-) MAGNESIUM DIAGNOSTICS INC.  
 PA  
 XX Wells IC;  
 PI  
 XX WPI; 2002-280663/32.  
 DR  
 XX  
 XX New monopeptides derived from butadienes, ethylenes and propanes are  
 PT magnesium binding defect antagonists, useful in the treatment of e.g.  
 PT hypertension, insulin resistance of type 2 diabetes mellitus and  
 PT eclampsia.  
 XX  
 PS Disclosure; Page 2; 38pp; English.

XX This invention relates to novel therapeutic compounds and methods used  
 CC for treating mammals with disorders such as salt-insensitive  
 CC hypertension. The monopeptide compounds of the invention are derived from  
 CC butadienes, ethylenes and propanes. The compounds of the invention are  
 CC used to correct a defect in magnesium binding within the plasma membranes  
 CC of somatic cells which results in a decrease in the intracellular  
 CC concentration of magnesium ions. These compounds may be used in the  
 CC treatment of a mammal affected with magnesium binding defect, salt-  
 CC sensitive (particularly hypertension), insulin resistance of type 2  
 CC diabetes mellitus and pre-eclampsia/eclampsia. The compounds of the  
 CC invention have an advantage over prior art compounds in that these  
 CC compounds are biologically stable. The present sequence represents the a  
 CC pentapeptide from the C terminal sequence of tachykinin known as  
 CC substance P, this peptide is sufficient to correct the magnesium binding  
 CC defect responsible for causing hypertension  
 XX  
 SQ Sequence 5 AA;

Query Match 100.0%; Score 27; DB 5; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PFGLM 5  
 DB 1 PFGLM 5

RESULT 18  
 ADE94203  
 ID ADE94203 standard; peptide; 5 AA.  
 XX  
 AC ADE94203;  
 XX  
 DT 12-FEB-2004 (first entry)  
 XX  
 DE High activity minimal IGF-1-derived peptide fragment #15.  
 XX  
 KW ophthalmological; dermatological; vulnery; insulin growth factor 1;  
 KW IGF-1; ophthalmology; dermatology; keratic injury; wound healing; skin;  
 KW corneal ulcer; exfoliation of corneal epithelium; keratitis; dry eye;  
 KW scratch; surgical cutting; skin ulcer; burns.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT Misc-difference 5 /note= "amidated C-terminus"  
 FT  
 XX  
 PN WO2003048192-A1.  
 XX  
 PD 12-JUN-2003.  
 XX  
 PF 03-DEC-2002; 2002WO-JP012632.  
 XX  
 PR 03-DEC-2001; 2001JP-00368103.  
 XX  
 PA (SANT ) SANTEN PHARM CO LTD.  
 PA (NISH/) NISHIDA T.  
 XX  
 PI Nishida T, Inui M, Nakamura M;  
 XX  
 DR WPI; 2003-505280/47.  
 XX  
 PT Novel peptides based on minimum activity expression units of insulin-like  
 PT growth factor-1, applicable in remedies in ophthalmology and dermatology  
 PT for treating keratic injury and promoting wound healing in skin.  
 XX  
 PS Disclosure; Page 7; 25pp; Japanese.  
 XX  
 CC The invention relates to the determination of the smallest peptide  
 CC fragment of insulin growth factor 1 (IGF-1) with the highest activity for  
 CC use in ophthalmology and dermatology. The peptides are applicable in

CC remedies in ophthalmology and dermatology for treating keratic injury and  
 CC promoting wound healing in the skin. The keratic injury is particularly  
 CC corneal ulcer, exfoliation of corneal epithelium, keratitis or dry eye.  
 CC The skin wound can be scratches, surgical cutting, skin ulcer, or burns.  
 CC This sequence represents one of the peptides of the invention with IGF-1  
 CC activity.  
 XX  
 SQ Sequence 5 AA;

Query Match 100.0%; Score 27; DB 7; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PFGLM 5  
 DB 1 PFGLM 5

RESULT 19  
 ADF92530  
 ID ADF92530 standard; peptide; 5 AA.  
 XX  
 AC ADF92530;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Substance P receptor agonist #3.  
 XX  
 KW analgesic; Mu-opioid receptor agonist; substance P receptor agonist;  
 KW chimeric hybrid; cyclic alkaloid moiety; mu opioid receptor; substance P;  
 KW opioid tolerance; morphine; substance P; SP; neuropeptide;  
 KW blood-brain barrier; morphine 6-glucuronide; pain; drug abuse; analgesia;  
 KW tolerance development; dependence formation;  
 KW substance P receptor agonist.  
 XX  
 OS Unidentified.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 5 /note= "C-terminal amide"  
 FT  
 XX US2003202981-A1.  
 XX  
 PD 30-OCT-2003.  
 XX  
 PF 26-APR-2002; 2002US-00134187.  
 XX  
 PR 26-APR-2002; 2002US-00134187.  
 XX  
 PA (KREA/) KREAM R M.  
 XX  
 PI Kream RM;  
 XX  
 DR WPI; 2003-900618/82.  
 XX  
 PT Chimeric hybrid molecule useful for treating pain comprising cyclic  
 PT alkaloid moiety which binds as agonist to mammalian to human mu opioid  
 PT receptor and peptide moiety which binds as agonist to mammalian substance  
 PT P.  
 XX  
 PS Claim 7; Page 7; 11pp; English.  
 XX  
 CC The invention describes a chimeric hybrid molecule (I) of a cyclic  
 CC alkaloid moiety which binds as an agonist to a mammalian/human mu opioid  
 CC receptor and a peptide moiety which binds as an agonist to a  
 CC mammalian/human substance P. (I) is useful for inhibiting development of  
 CC opioid tolerance by chemically combining a pharmacologically active form  
 CC of substance P with morphine in (I). (I) is useful for transporting an  
 CC active form of SP or neuropeptide across the blood-brain barrier into the  
 CC central nervous system using the active metabolite of morphine, morphine  
 CC 6-glucuronide, contained in (I). (I) is useful for targeted drug delivery  
 CC of reciprocally regulating analgesic chemicals across the blood-brain  
 CC barrier into the central nervous system using (I). (I) is useful for

CC treating pain in a mammal and for treating drug abuse in a mammal by  
 CC administering (I) in substitution for the drug on which the mammal became  
 CC dependent and/or tolerant and thereafter adjusting the dosage as  
 CC tolerance and/or dependence is modulated. (I) induces analgesia in a  
 CC mammal with tolerance development markedly less than that of morphine.  
 CC (I) efficiently modulates the activation of the MOR and to reduce or  
 CC eliminate tolerance development and dependence formation. This is the  
 CC amino acid sequence of a peptide that functions as a substance P receptor  
 CC agonist.  
 XX  
 SQ Sequence 5 AA;

Query Match 100.0%; Score 27; DB 7; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFGLM 5  
 Db 1 FFGLM 5

## RESULT 20

ADN95078  
 ID ADN95078 standard; peptide; 5 AA.

AC ADN95078;

XX 26-AUG-2004 (first entry)

XX Mammalian substance P peptide (amino acids 7-11).

XX Opioid tolerance; substance P; morphine; cyclic alkaloid; mammalian;  
 KW mu opioid receptor; acute pain; chronic pain; drug abuse;  
 KW opioid analgesia; analgesic; antiaddictive.

XX Mammalia.

XX Key Location/Qualifiers

FT Modified-site 5 /note= "C-terminal amide"

FT US2004106636-A1.

PN 03-JUN-2004.

XX 17-OCT-2003; 2003US-00688741.

XX 26-APR-2002; 2002US-00134187.

XX (KREA/) KREAM R M.

XX Kream RM;

XX WPI; 2004-419489/39.

XX Inhibiting development of opioids tolerance involves use of chimeric  
 PT hybrid molecules containing an opioid moiety of chemically modified  
 PT morphine.

XX Disclosure; SEQ ID NO 3; 10pp; English.

XX The present invention relates to a method of inhibiting the development  
 CC of opioid tolerance. The method involves administering a chemical  
 CC combination of an active form of substance P with morphine in a new  
 CC chimeric hybrid molecule. The morphine is chemically modified and  
 CC covalently linked through its 6'OH group, and comprises a cyclic alkaloid  
 CC moiety which binds as an agonist to a mammalian or human mu opioid  
 CC receptor. An active C-mu terminal substance P fragment, chemically  
 CC modified and covalently linked through its free NH2 group, comprises a  
 CC peptide moiety, which binds moiety which binds as an agonist to a  
 CC mammalian/human substance P receptor. A compact, but flexible, molecular  
 CC hinge covalently crosses links morphine through its 6'OH group to the free  
 CC NH2 group of the substance P receptor agonist moiety, so as to allow both

CC the mu opioid receptor and the substance P receptor agonist moieties to  
 CC activate their respective receptors simultaneously and independently. The  
 CC chimeric hybrid molecules are administered intrathecally, systemically,  
 CC orally, intradermally, parenterally (e.g. subcutaneously, intravenously),  
 CC through injection, transdermally, (e.g. topically), transmucosally or  
 CC rectally. The method is useful for the treatment of acute and chronic  
 CC pain, and drug abuse. The molecules show reduced side effects. The  
 CC molecules provide opioid analgesia in living subjects while inhibiting  
 CC tolerance development and dependence formation. The present sequence  
 CC representing a peptide from mammalian substance P is used in the method  
 CC of the invention.

XX Sequence 5 AA;

Query Match 100.0%; Score 27; DB 8; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFGLM 5  
 Db 1 FFGLM 5

## RESULT 21

ADR43771  
 ID ADR43771 standard; peptide; 5 AA.

AC ADR43771;

XX 18-NOV-2004 (first entry)

XX Human magnesium binding defect (MgBD) peptide mimetic #1.

XX Magnesium binding defect; MgBD; MgBD binding defect peptide mimetic;  
 KW physiological disorder; preclampsia; pregnancy;  
 KW salt-sensitive essential hypertension; type 2 diabetes mellitus; human.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Modified-site 5 /label= OTHER  
 FT /note= "OTHER= C-terminal amide"

XX US2004171093-A1.

XX 02-SEP-2004.

XX 22-MAR-2004; 2004US-00805881.

XX 10-MAR-1999; 99US-00265690.

XX 09-AUG-2000; 2000US-00635266.

XX 24-JAN-2002; 2002US-00053669.

XX 29-AUG-2002; 2002US-00230133.

XX 28-OCT-2003; 2003US-00695536.

XX (WELL/) WELLS I C.

XX Wells IC;

XX WPI; 2004-625105/60.

XX Assessing predisposition to physiological disorder associated with  
 PT magnesium binding defect in individual, by measuring level of amidated  
 PT peptides associated with magnesium binding defect in sample and comparing  
 PT peptide level to standard.

XX Claim 1; SEQ ID NO 1; 21pp; English.

XX The invention relates to a method of assessing a predisposition to a  
 CC physiological disorder associated with a magnesium binding defect in an  
 CC individual, involving measuring the level of amidated peptides associated  
 CC with the magnesium binding defect in a sample of body fluid of the

CC individual and comparing the level of peptide to a standard, where a  
CC significantly lower level of the peptide is indicative of a  
CC predisposition of the individual to the physiological disorder. The  
CC invention also relates to a method of monitoring progress in treatment of  
CC a physiological disorder associated with a magnesium binding defect in an  
CC individual, involving comparing the level of peptide to the level of  
CC peptide after treatment, where a significant increase in the level of the  
CC peptide is indicative of the progress of treatment of the individual, a  
CC monoclonal antibody that specifically binds to a peptide or its peptide  
CC mimetic, a prognosis reagent for determining the presence of a magnesium  
CC binding defect, generating a deficit of plasma membrane tightly bound  
CC magnesium ion in mammalian somatic cells involving obtaining a sample of  
CC body fluid comprising somatic cells, collecting the somatic cells from  
CC the body fluid by centrifugation, resuspending the somatic cells in a  
CC cell stabilising buffer, removing a sample of the suspended somatic  
CC cells, measuring the level of tightly bound magnesium ion in the sample  
CC of the somatic cells and repeating the removing and measuring steps at  
CC subsequent times until the level of tightly bound magnesium is  
CC significantly reduced and the somatic cells remain intact, a method of  
CC identifying substances which promote binding of tightly bound magnesium  
CC ion to a plasma membrane of mammalian somatic cells involving suspending  
CC mammalian somatic cells having a deficit of plasma membrane tightly bound  
CC magnesium in a physiological medium including magnesium ion, adding a  
CC substance to be tested to the suspension and measuring the level of  
CC tightly bound magnesium ion in the plasma membrane of the somatic cells  
CC where a significant increase in the level of plasma membrane tightly  
CC bound magnesium after addition of the substance to be tested is  
CC indicative of promotion of binding by the substance, and a method for  
CC ameliorating or correcting a magnesium binding defect in an individual  
CC involving administering to the individual a substance which promotes  
CC binding of tightly bound magnesium ion to the plasma membrane of  
CC mammalian somatic cells. The methods are useful for assessing a  
CC predisposition to a physiological disorder associated with a magnesium  
CC binding defect in an individual, where the disorder is a predisposition  
CC to pre-eclampsia during pregnancy, salt-sensitive essential hypertension  
CC or type 2 diabetes mellitus associated with the magnesium binding defect.  
CC The method is also useful for ameliorating or correcting a magnesium  
CC binding defect (MgBD) in an individual. This sequence represents a human  
CC MgBD mimetic peptide of the invention.

XX  
SQ Sequence 5 AA;

Query Match 100.0%; Score 27; DB 8; Length 5;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PFGLM 5  
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Db 1 PFGLM 5

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Perfect score: 27

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#### SUMMARIES

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2	27	100.0	5	14 US-10-053-669-1	Sequence 1, Appli
3	27	100.0	5	15 US-10-134-187-3	Sequence 3, Appli
4	27	100.0	5	16 US-10-688-741-3	Sequence 3, Appli
5	27	100.0	5	16 US-10-805-881-1	Sequence 1, Appli
6	27	100.0	5	17 US-10-497-628-15	Sequence 15, Appli
7	24	88.9	5	17 US-10-497-628-16	Sequence 16, Appli
8	22	81.5	4	17 US-10-821-240A-270	Sequence 270, App
9	21	77.8	4	9 US-09-265-690C-2	Sequence 2, Appli
10	21	77.8	4	14 US-10-230-133-3	Sequence 3, Appli
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16	21	77.8	5	17	US-10-497-628-17	Sequence 17, Appli
17	20	74.1	5	9	US-09-265-690C-4	Sequence 4, Appli
18	20	74.1	5	14	US-10-230-133-4	Sequence 4, Appli
19	20	74.1	5	14	US-10-053-669-4	Sequence 4, Appli
20	20	74.1	5	16	US-10-695-536-4	Sequence 4, Appli
21	20	74.1	5	16	US-10-805-881-4	Sequence 4, Appli
22	19	70.4	5	16	US-10-346-737A-22	Sequence 22, Appli
23	18	66.7	4	8	US-08-484-409-14	Sequence 14, Appli
24	18	66.7	4	14	US-10-155-170-4	Sequence 826, App
25	18	66.7	4	14	US-10-351-641-826	Sequence 4, Appli
26	18	66.7	4	16	US-10-822-661-4	Sequence 298, App
27	18	66.7	4	17	US-10-821-240A-298	Sequence 38, Appli
28	18	66.7	5	11	US-09-920-306-38	Sequence 32, Appli
29	17	63.0	5	14	US-10-168-789A-32	Sequence 9, Appli
30	16	59.3	4	9	US-09-879-442A-9	Sequence 2, Appli
31	16	59.3	5	10	US-09-886-135-2	Sequence 45, Appli
32	16	59.3	5	16	US-10-620-052A-45	Sequence 3, Appli
33	16	59.3	5	16	US-10-337-105-3	Sequence 25, Appli
34	16	59.3	5	17	US-10-891-122-2	Sequence 2, Appli
35	16	59.3	3	14	US-10-230-133-2	Sequence 2, Appli
36	15	55.6	3	16	US-10-695-536-2	Sequence 11, Appli
37	15	55.6	4	17	US-10-823-964A-11	Sequence 40, Appli
38	15	55.6	5	11	US-09-920-306-40	Sequence 39, Appli
39	15	55.6	5	14	US-10-301-499A-25	Sequence 85, Appli
40	15	55.6	5	14	US-10-168-789A-39	Sequence 9, Appli
41	15	55.6	5	15	US-10-194-441A-85	Sequence 360, App
42	15	55.6	5	15	US-10-311-366-9	
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#### ALIGNMENTS

RESULT 1  
US-09-265-690C-1  
; Sequence 1, Application US/09265690C  
; Publication No. US20010051345A1  
; GENERAL INFORMATION:  
; APPLICANT: Wellb, Ibert  
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac  
; FILE REFERENCE: 1427001  
; CURRENT APPLICATION NUMBER: US/09/265,690C  
; CURRENT FILING DATE: 1999-03-10  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1  
; LENGTH: 5  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD\_RES  
; LOCATION: (5)..(5)  
; OTHER INFORMATION: AMIDATION  
US-09-265-690C-1

Query Match 100.0%; Score 27; DB 9; Length 5;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PFGLM 5  
Db 1 PFGLM 5

RESULT 2  
US-10-053-669-1  
; Sequence 1, Application US/10053669  
; Publication No. US20030077658A1

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; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound
; FILE REFERENCE: N1427-005
; CURRENT APPLICATION NUMBER: US/10/053,669
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: 09/265,690
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (5)..(5)
; OTHER INFORMATION: AMIDATION
US-10-053-669-1

Query Match      100.0%; Score 27; DB 14; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 FFGLM 5
Db      1 FFGLM 5

RESULT 3
US-10-134-187-3
; Sequence 3, Application US/10134187
; Publication No. US20030202981A1
; GENERAL INFORMATION:
; APPLICANT: Kream, Richard M.
; APPLICANT: Kream, Richard M.
; TITLE OF INVENTION: Chimeric Hybrid Analgesics
; FILE REFERENCE: Kream
; CURRENT APPLICATION NUMBER: US/10/134,187
; CURRENT FILING DATE: 2002-04-26
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 5
; TYPE: PRT
; ORGANISM: mammalian
US-10-134-187-3

Query Match      100.0%; Score 27; DB 15; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 FFGLM 5
Db      1 FFGLM 5

RESULT 4
US-10-688-741-3
; Sequence 3, Application US/10688741
; Publication No. US20040106636A1
; GENERAL INFORMATION:
; APPLICANT: Kream, Richard M.
; APPLICANT: Kream, Richard M.
; APPLICANT: Kream, Richard M.
; TITLE OF INVENTION: Method of Inhibiting Opioid Tolerance Development With Chimeric H
; FILE REFERENCE: Analgesics
; CURRENT APPLICATION NUMBER: US/10/688,741
; CURRENT FILING DATE: 2003-10-17
; NUMBER OF SEQ ID NOS: 3

; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 5
; TYPE: PRT
; ORGANISM: mammalian
US-10-688-741-3

Query Match      100.0%; Score 27; DB 16; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 FFGLM 5
Db      1 FFGLM 5

RESULT 5
US-10-805-881-1
; Sequence 1, Application US/10805881
; Publication No. US20040171093A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert C.
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound
; FILE REFERENCE: 800812-0005
; CURRENT APPLICATION NUMBER: US/10/805,881
; CURRENT FILING DATE: 2004-03-22
; PRIOR APPLICATION NUMBER: US 10/053,669
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: US 10/695,536
; PRIOR FILING DATE: 2003-10-28
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (5)..(5)
; OTHER INFORMATION: AMIDATION
US-10-805-881-1

Query Match      100.0%; Score 27; DB 16; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 FFGLM 5
Db      1 FFGLM 5

RESULT 6
US-10-497-628-15
; Sequence 15, Application US/10497628
; Publication No. US20050009752A1
; GENERAL INFORMATION:
; APPLICANT: Teruo Nishida
; APPLICANT: Makoto Inui
; APPLICANT: Masatsugu Nakamura
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME
; FILE REFERENCE: 04355/HG
; CURRENT APPLICATION NUMBER: US/10/497,628
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: JP 2001-368103
; PRIOR FILING DATE: 2001-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Human
US-10-497-628-15

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Query Match 100.0%; Score 27; DB 17; Length 5;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 5  
DB 1 FGLM 5

## RESULT 7

US-10-497-628-16  
; Sequence 16, Application US/10497628  
; Publication No. US20050009752A1  
; GENERAL INFORMATION:  
; APPLICANT: Teruo Nishida  
; APPLICANT: Makoto Inui  
; APPLICANT: Masatsugu Nakamura  
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME  
; FILE REFERENCE: 04355/HG  
; CURRENT APPLICATION NUMBER: US/10/497,628  
; CURRENT FILING DATE: 2004-06-03  
; PRIOR FILING DATE: JP 2001-368103  
; PRIOR FILING DATE: 2001-12-01  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 16  
; LENGTH: 5  
; TYPE: PRT  
; ORGANISM: Human  
US-10-497-628-16

Query Match 88.9%; Score 24; DB 17; Length 5;  
Best Local Similarity 80.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 5  
DB 1 FGLM 5

## RESULT 8

US-10-821-240A-270  
; Sequence 270, Application US/10821240A  
; Publication No. US20050037430A1  
; GENERAL INFORMATION:  
; APPLICANT: Khan, Nisar A.  
; APPLICANT: Benner, Robert  
; TITLE OF INVENTION: Gene regulator  
; FILE REFERENCE: 2183-5223US  
; CURRENT APPLICATION NUMBER: US/10/821,240A  
; CURRENT FILING DATE: 2004-04-08  
; PRIOR APPLICATION NUMBER: 10/028,075  
; PRIOR FILING DATE: 2001-12-21  
; PRIOR APPLICATION NUMBER: EP 01203748.7  
; PRIOR FILING DATE: 2001-10-04  
; NUMBER OF SEQ ID NOS: 312  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 270  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: derivative peptide based on  
; OTHER INFORMATION: metalloproteinase-2  
US-10-821-240A-270

Query Match 81.5%; Score 22; DB 17; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGL 4  
DB 1 FGL 4

DB 1 FGL 4

## RESULT 9

US-09-265-690C-2  
; Sequence 2, Application US/09265690C  
; Publication No. US20010051345A1  
; GENERAL INFORMATION:  
; APPLICANT: Wells, Ibert  
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac  
; FILE REFERENCE: 1427001  
; CURRENT APPLICATION NUMBER: US/09/265,690C  
; CURRENT FILING DATE: 1999-03-10  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD\_RES  
; LOCATION: (4)..(4)  
; OTHER INFORMATION: AMIDATION  
US-09-265-690C-2

Query Match 77.8%; Score 21; DB 9; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5  
DB 1 FGLM 4

## RESULT 10

US-10-230-133-3  
; Sequence 3, Application US/10230133  
; Publication No. US20030040625A1  
; GENERAL INFORMATION:  
; APPLICANT: Wells, Ibert  
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and  
; FILE REFERENCE: 2892-106  
; CURRENT APPLICATION NUMBER: US/10/230,133  
; CURRENT FILING DATE: 2002-08-29  
; PRIOR APPLICATION NUMBER: 09/635,266  
; PRIOR FILING DATE: 2000-08-09  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD\_RES  
; LOCATION: (4)..(4)  
; OTHER INFORMATION: AMIDATION  
US-10-230-133-3

Query Match 77.8%; Score 21; DB 14; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5  
DB 1 FGLM 4

## RESULT 11

US-10-053-669-2  
; Sequence 2, Application US/10053669  
; Publication No. US20030077658A1

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; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Ma
; FILE REFERENCE: N1427-005
; CURRENT APPLICATION NUMBER: US/10/053,669
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: 09/265,690
; PRIOR FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-053-669-2

Query Match
Best Local Similarity 77.8%; Score 21; DB 14; Length 4;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5
Db 1 FGLM 4

RESULT 12
US-10-695-536-3
; Sequence 3, Application US/10695536
; Publication No. US20040110692A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert Clifton
; TITLE OF INVENTION: Antagonists of the Magnesium Binding Defect as Therapeutic Agents
; FILE REFERENCE: 800812-0008
; CURRENT APPLICATION NUMBER: US/10/695,536
; CURRENT FILING DATE: 2003-10-28
; PRIOR FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: US 10/230,133
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-695-536-3

Query Match
Best Local Similarity 77.8%; Score 21; DB 16; Length 4;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5
Db 1 FGLM 4

RESULT 13
US-10-805-881-2
; Sequence 2, Application US/10805881
; Publication No. US20040171093A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert C.
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound
; FILE REFERENCE: 800812-0005
; CURRENT APPLICATION NUMBER: US/10/805,881
; CURRENT FILING DATE: 2004-03-22
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: US 10/053,669
; PRIOR FILING DATE: 2003-10-28
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-805-881-2

Query Match
Best Local Similarity 77.8%; Score 21; DB 16; Length 4;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5
Db 1 FGLM 4

RESULT 14
US-10-497-628-2
; Sequence 2, Application US/10497628
; Publication No. US20050009752A1
; GENERAL INFORMATION:
; APPLICANT: Teruo Nishida
; APPLICANT: Makoto Inui
; APPLICANT: Masatsugu Nakamura
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME
; FILE REFERENCE: 04355/HG
; CURRENT APPLICATION NUMBER: US/10/497,628
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: JP 2001-368103
; PRIOR FILING DATE: 2001-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Human
US-10-497-628-2

Query Match
Best Local Similarity 77.8%; Score 21; DB 17; Length 4;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5
Db 1 FGLM 4

RESULT 15
US-10-346-737A-30
; Sequence 30, Application US/10346737A
; Publication No. US20040142379A1
; GENERAL INFORMATION:
; APPLICANT: St. Hilaire, Phaedria
; TITLE OF INVENTION: AFFINITY FISHING FOR LIGANDS AND PROTEIN RECEPTORS
; FILE REFERENCE: 11225,16US01
; CURRENT APPLICATION NUMBER: US/10/346,737A
; CURRENT FILING DATE: 2003-01-16
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30

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; TITLE OF INVENTION: Magnesium for Disease Diagnosis
; FILE REFERENCE: 800812-0005
; CURRENT APPLICATION NUMBER: US/10/805,881
; CURRENT FILING DATE: 2004-03-22
; PRIOR APPLICATION NUMBER: US 10/053,669
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: US 10/695,536
; PRIOR FILING DATE: 2003-10-28
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-805-881-2

Query Match
Best Local Similarity 77.8%; Score 21; DB 16; Length 4;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5
Db 1 FGLM 4

RESULT 14
US-10-497-628-2
; Sequence 2, Application US/10497628
; Publication No. US20050009752A1
; GENERAL INFORMATION:
; APPLICANT: Teruo Nishida
; APPLICANT: Makoto Inui
; APPLICANT: Masatsugu Nakamura
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME
; FILE REFERENCE: 04355/HG
; CURRENT APPLICATION NUMBER: US/10/497,628
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: JP 2001-368103
; PRIOR FILING DATE: 2001-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Human
US-10-497-628-2

Query Match
Best Local Similarity 77.8%; Score 21; DB 17; Length 4;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5
Db 1 FGLM 4

RESULT 15
US-10-346-737A-30
; Sequence 30, Application US/10346737A
; Publication No. US20040142379A1
; GENERAL INFORMATION:
; APPLICANT: St. Hilaire, Phaedria
; TITLE OF INVENTION: AFFINITY FISHING FOR LIGANDS AND PROTEIN RECEPTORS
; FILE REFERENCE: 11225,16US01
; CURRENT APPLICATION NUMBER: US/10/346,737A
; CURRENT FILING DATE: 2003-01-16
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30

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; LENGTH: 5  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Peptide  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (1)-(1)  
; OTHER INFORMATION: Xaa is T(Sa)  
US-10-346-737A-30

Query Match 77.8%; Score 21; DB 16; Length 5;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2 FGLM 5  
|||  
Db 2 FGLM 5

Search completed: March 23, 2005, 15:07:05  
Job time : 92 secs



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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:37:21 ; Search time 30 Seconds  
(without alignments)  
12.442 Million cell updates/sec

Title: SEQ1  
Perfect score: 27  
Sequence: 1 ffglm 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 27945

Minimum DB seq length: 0  
Maximum DB seq length: 5

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA\*  
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Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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4	27	100.0	5	3	US-09-265-690C-1
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6	22	81.5	5	2	US-07-737-371E-47
7	22	81.5	5	2	US-07-737-371E-49
8	21	77.8	4	1	US-08-441-591-63
9	21	77.8	4	1	US-08-303-362A-63
10	21	77.8	4	3	US-09-265-690C-2
11	21	77.8	4	4	US-09-635-266-3
12	21	77.8	4	4	US-10-230-133-3
13	21	77.8	4	5	PCT-US95-05600-80
14	21	77.8	5	2	US-08-070-301-6
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17	20	74.1	5	1	US-08-391-910-1
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29	20	74.1	5	4	US-09-635-266-4	Sequence 4, Appli
30	20	74.1	5	4	US-10-230-133-4	Sequence 4, Appli
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34	18	66.7	4	1	US-07-822-924-7	Sequence 7, Appli
35	18	66.7	4	1	US-08-285-777-1	Sequence 1, Appli
36	18	66.7	4	1	US-08-127-904-11	Sequence 11, Appli
37	18	66.7	4	1	US-08-431-539-4	Sequence 4, Appli
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39	18	66.7	4	3	US-09-082-279B-826	Sequence 826, Appli
40	18	66.7	4	3	US-09-264-709A-12	Sequence 12, Appli
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43	18	66.7	4	3	US-09-264-709A-23	Sequence 23, Appli
44	18	66.7	4	3	US-09-264-709A-24	Sequence 24, Appli
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ALIGNMENTS

RESULT 1  
US-07-934-553-2  
; Sequence 2, Application US/07934553  
; Patent No. 5314690  
; GENERAL INFORMATION:  
; APPLICANT: PATTERSON, ROY  
; APPLICANT: HARRIS, KATHLEEN E  
; TITLE OF INVENTION: METHOD AND COMPOSITION FOR REDUCING Ige  
; TITLE OF INVENTION: ANTIBODIES TO SPECIFIC ALLERGENS  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: TILTON, FALLON, LUNGUMUS & CHESTNUT  
; STREET: 100 SOUTH WACKER DRIVE  
; CITY: CHICAGO  
; STATE: ILLINOIS  
; COUNTRY: USA  
; ZIP: 60606-4002  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/934,553  
; FILING DATE: 19920821  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/705,071  
; FILING DATE: 24-MAY-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: FENTRESS, SUSAN B  
; REGISTRATION NUMBER: 31,327  
; REFERENCE/DOCKET NUMBER: NU-9033CIP  
; TELEPHONE: 312/456-8000  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 5 amino acids  
; TYPE: AMINO ACID  
; STRANDEDNESS: unknown  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
US-07-934-553-2

Query Match 100.0%; Score 27; DB 1; Length 5;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 PFGIM 5  
|||||

Db 1 FFGLM 5

# RESULT 2

```

US-08-225-474-2
; Sequence 2, Application US/08225474
; Patent No. 5560915
; GENERAL INFORMATION:
; APPLICANT: Patterson, Roy
; APPLICANT: Harris, Kathleen E.
; TITLE OF INVENTION: Method and Composition for Treating
; TITLE OF INVENTION: Ige Mediated Allergies
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Tilton, Fallon, Lungmus & Chestnut
; STREET: 100 S. Wacker Drive, Suite 960
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606-4002
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/225,474
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/934,553
; FILING DATE: 21-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/705,071
; FILING DATE: 24-MAY-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Tilton, Timothy L.
; REGISTRATION NUMBER: 16,926
; REFERENCE/DOCKET NUMBER: NU 9033-CIP2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312)-456-8000
; TELEFAX: (312)-456-7776
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-08-225-474-2

```

Query Match 100.0%; Score 27; DB 1; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFGLM 5  
 |||||  
 Db 1 FFGLM 5

# RESULT 3

```

US-07-737-371E-6
; Sequence 6, Application US/07737371E
; Patent No. 5876948
; GENERAL INFORMATION:
; APPLICANT: Yankner, Bruce A.
; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY
; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)
; NUMBER OF SEQUENCES: 77
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston

```

```

; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/737,371E
; FILING DATE: 29-JUL-1991
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/559,172
; FILING DATE: 27-JUL-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Freeman, John W.
; REGISTRATION NUMBER: 29,066
; REFERENCE/DOCKET NUMBER: 00108/028002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-737-371E-6

```

Query Match 100.0%; Score 27; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFGLM 5  
 |||||  
 Db 1 FFGLM 5

# RESULT 4

```

US-09-265-690C-1
; Sequence 1, Application US/09265690C
; Patent No. 6372440
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac
; TITLE OF INVENTION: for Disease Diagnosis
; FILE REFERENCE: 1427001
; CURRENT APPLICATION NUMBER: US/09/265,690C
; CURRENT FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 1
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD RES
; LOCATION: (5)..(5)
; OTHER INFORMATION: AMIDATION
US-09-265-690C-1

```

Query Match 100.0%; Score 27; DB 3; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFGLM 5  
 |||||  
 Db 1 FFGLM 5

# RESULT 5



US-07-737-371E-48  
 ; Sequence 48, Application US/07737371E  
 ; Patent No. 5876948  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Yankner, Bruce A.  
 ; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY  
 ; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)  
 ; NUMBER OF SEQUENCES: 77  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Fish & Richardson, P.C.  
 ; STREET: 225 Franklin Street  
 ; CITY: Boston  
 ; STATE: MA  
 ; COUNTRY: US  
 ; ZIP: 02110-2804  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: Windows95  
 ; SOFTWARE: FastSeq for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/07/737,371E  
 ; FILING DATE: 29-JUL-1991  
 ; CLASSIFICATION: 536  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 07/559,172  
 ; FILING DATE: 27-JUL-1990  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Freeman, John W.  
 ; REGISTRATION NUMBER: 29,066  
 ; REFERENCE/DOCKET NUMBER: 00108/028002  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 617-542-5070  
 ; TELEFAX: 617-542-8906  
 ; TELEX: 200154  
 ; INFORMATION FOR SEQ ID NO: 48:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 5 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-07-737-371E-48

Query Match 88.9%; Score 24; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
 Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PFGLM 5  
 Db 1 YFGLM 5

RESULT 6  
 US-07-737-371E-47  
 ; Sequence 47, Application US/07737371E  
 ; Patent No. 5876948  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Yankner, Bruce A.  
 ; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY  
 ; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)  
 ; NUMBER OF SEQUENCES: 77  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Fish & Richardson, P.C.  
 ; STREET: 225 Franklin Street  
 ; CITY: Boston  
 ; STATE: MA  
 ; COUNTRY: US  
 ; ZIP: 02110-2804  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: Windows95  
 ; SOFTWARE: FastSeq for Windows Version 2.0

US-07-737-371E-47  
 ; Sequence 47, Application US/07737371E  
 ; Patent No. 5876948  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Yankner, Bruce A.  
 ; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY  
 ; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)  
 ; NUMBER OF SEQUENCES: 77  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Fish & Richardson, P.C.  
 ; STREET: 225 Franklin Street  
 ; CITY: Boston  
 ; STATE: MA  
 ; COUNTRY: US  
 ; ZIP: 02110-2804  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: Windows95  
 ; SOFTWARE: FastSeq for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/07/737,371E  
 ; FILING DATE: 29-JUL-1991  
 ; CLASSIFICATION: 536  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 07/559,172  
 ; FILING DATE: 27-JUL-1990  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Freeman, John W.  
 ; REGISTRATION NUMBER: 29,066  
 ; REFERENCE/DOCKET NUMBER: 00108/028002  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 617-542-5070  
 ; TELEFAX: 617-542-8906  
 ; TELEX: 200154  
 ; INFORMATION FOR SEQ ID NO: 47:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 5 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; FEATURE:  
 ; LOCATION: 5...5  
 ; OTHER INFORMATION: where Xaa at position 5 is Nle  
 ; US-07-737-371E-47

Query Match 81.5%; Score 22; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PFGL 4  
 Db 1 PFGL 4

RESULT 7  
 US-07-737-371E-49  
 ; Sequence 49, Application US/07737371E  
 ; Patent No. 5876948  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Yankner, Bruce A.  
 ; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY  
 ; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)  
 ; NUMBER OF SEQUENCES: 77  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Fish & Richardson, P.C.  
 ; STREET: 225 Franklin Street  
 ; CITY: Boston  
 ; STATE: MA  
 ; COUNTRY: US  
 ; ZIP: 02110-2804  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: Windows95  
 ; SOFTWARE: FastSeq for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/07/737,371E  
 ; FILING DATE: 29-JUL-1991  
 ; CLASSIFICATION: 536  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 07/559,172  
 ; FILING DATE: 27-JUL-1990  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Freeman, John W.  
 ; REGISTRATION NUMBER: 29,066  
 ; REFERENCE/DOCKET NUMBER: 00108/028002  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 617-542-5070  
 ; TELEFAX: 617-542-8906  
 ; TELEX: 200154  
 ; INFORMATION FOR SEQ ID NO: 49:  
 ; SEQUENCE CHARACTERISTICS:

```

; LENGTH: 5 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; LOCATION: 5...5
; OTHER INFORMATION: where Xaa at position 5 is ethionine
US-07-737-371E-49

```

```

Query Match      81.5%; Score 22; DB 2; Length 5;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 PFGL 4
Db 1 PFGL 4

```

```

RESULT 8
US-08-441-591-63
; Sequence 63, Application US/08441591
; Patent No. 5637862
; GENERAL INFORMATION:
; APPLICANT: NIEUWLANDT, D., GOLD, L. AND WECKER, M.
; TITLE OF INVENTION: HIGH-AFFINITY
; TITLE OF INVENTION: OLIGONUCLEOTIDE LIGANDS
; TITLE OF INVENTION: TO THE TACHYKININ
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Swanson & Bratschun, L.L.C.
; STREET: 8400 E. Prentice Avenue, Suite 200
; CITY: Englewood
; STATE: Colorado
; COUNTRY: USA
; ZIP: 80111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MG storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/441,591
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/303,362
; FILING DATE: 9-SEPTEMBER-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/714,131
; FILING DATE: 10-JUNE-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/931,473
; FILING DATE: 17-AUGUST-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/117,991
; FILING DATE: 8-SEPTEMBER 1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/964,624
; FILING DATE: 21-OCTOBER-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Barry J. Swanson
; REGISTRATION NUMBER: 33,215
; REFERENCE/DOCKET NUMBER: NEX21/C
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 793-3333
; TELEFAX: (303) 793-3433
; INFORMATION FOR SEQ ID NO: 63:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4

```

```

; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-441-591-63
Query Match      77.8%; Score 21; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 2 FGLM 5
Db 1 FGLM 4

```

```

RESULT 9
US-08-303-362A-63
; Sequence 63, Application US/08303362A
; Patent No. 5648214
; GENERAL INFORMATION:
; APPLICANT: NIEUWLANDT, D., GOLD, L. AND WECKER, M.
; TITLE OF INVENTION: HIGH-AFFINITY
; TITLE OF INVENTION: OLIGONUCLEOTIDE LIGANDS
; TITLE OF INVENTION: TO THE TACHYKININ
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Swanson & Bratschun, L.L.C.
; STREET: 8400 E. Prentice Avenue, Suite 200
; CITY: Englewood
; STATE: Colorado
; COUNTRY: USA
; ZIP: 80111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MG storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/303,362A
; FILING DATE: 9-SEPTEMBER-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/714,131
; FILING DATE: 10-JUNE-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/931,473
; FILING DATE: 17-AUGUST-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/117,991
; FILING DATE: 8-SEPTEMBER 1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/964,624
; FILING DATE: 21-OCTOBER-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Barry J. Swanson
; REGISTRATION NUMBER: 33,215
; REFERENCE/DOCKET NUMBER: NEX21
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 793-3333
; TELEFAX: (303) 793-3433
; INFORMATION FOR SEQ ID NO: 63:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-303-362A-63

```

```

Query Match      77.8%; Score 21; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;

```

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5  
|  
|  
|  
|  
Db 1 FGLM 4

## RESULT 10

US-09-265-690C-2

; Sequence 3, Application US/09265690C

; Patent No. 6372440

; GENERAL INFORMATION:

; APPLICANT: Wells, Ibert

; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Ma

; FILE REFERENCE: 1427001

; CURRENT APPLICATION NUMBER: US/09/265,690C

; CURRENT FILING DATE: 1999-03-10

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 2

; LENGTH: 4

; TYPE: PRT

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: MOD-RES

; LOCATION: (4)..(4)

; OTHER INFORMATION: AMIDATION

US-09-265-690C-2

## Query Match

Best Local Similarity 77.8%; Score 21; DB 3; Length 4;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5  
|  
|  
|  
|  
Db 1 FGLM 4

## RESULT 11

US-09-635-266-3

; Sequence 3, Application US/09635266

; Patent No. 6455734

; GENERAL INFORMATION:

; APPLICANT: Wells, Ibert

; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and

; FILE REFERENCE: N1427-002

; CURRENT APPLICATION NUMBER: US/09/635,266

; CURRENT FILING DATE: 2000-08-09

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 3

; LENGTH: 4

; TYPE: PRT

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: MOD-RES

; LOCATION: (4)..(4)

; OTHER INFORMATION: AMIDATION

US-09-635-266-3

## Query Match

Best Local Similarity 77.8%; Score 21; DB 4; Length 4;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5  
|  
|  
|  
|  
Db 1 FGLM 4

## RESULT 12

US-10-230-133-3

; Sequence 3, Application US/10230133

; Patent No. 6664420

; GENERAL INFORMATION:

; APPLICANT: Wells, Ibert

; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and

; FILE REFERENCE: 2892-106

; CURRENT APPLICATION NUMBER: US/10/230,133

; CURRENT FILING DATE: 2002-08-29

; PRIOR APPLICATION NUMBER: 09/635,266

; PRIOR FILING DATE: 2000-08-09

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 3

; LENGTH: 4

; TYPE: PRT

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: MOD-RES

; LOCATION: (4)..(4)

; OTHER INFORMATION: AMIDATION

US-10-230-133-3

## Query Match

Best Local Similarity 77.8%; Score 21; DB 4; Length 4;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FGLM 5  
|  
|  
|  
|  
Db 1 FGLM 4

## RESULT 13

PCT-US95-05600-80

; Sequence 80, Application PC/TUS9505600

; GENERAL INFORMATION:

; APPLICANT: GOLD, LARRY

; APPLICANT: NIEUWLANDT, DAN

; APPLICANT: WECKER, MATTHEW

; APPLICANT: SCHNEIDER, DANIEL J.

; APPLICANT: FEIGON, JULI

; APPLICANT: ALLEN, PATRICK

; APPLICANT: SULLENGER, BRUCE A.

; APPLICANT: DOUDNA, JENNIFER, A.

; TITLE OF INVENTION: HIGH-AFFINITY LIGANDS OF

; TITLE OF INVENTION: INSULIN RECEPTOR ANTIBODIES, TACHYKININ SUBSTANCE

; TITLE OF INVENTION: P, HIV INTEGRASE AND HIV-1 REVERSE TRANSCRIPTASE

; NUMBER OF SEQUENCES: 239

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Swanson & Bratschun, L.L.C.

; STREET: 8400 E. Prentice Avenue, Suite 200

; CITY: Englewood

; STATE: Colorado

; COUNTRY: USA

; ZIP: 80111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MG

; MEDIUM TYPE: Storage

; COMPUTER: IBM compatible

; OPERATING SYSTEM: MS-DOS

; SOFTWARE: WordPerfect 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US95/05600

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/238,863

; FILING DATE: 06-MAY-1994

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/248,632

; FILING DATE: 24-MAY-1994

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

```

; APPLICATION NUMBER: 08/303,362
; FILING DATE: 09-SEPTEMBER-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/361,795
; FILING DATE: 21-DECEMBER-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/117,991
; FILING DATE: 08-SEPTEMBER-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/931,473
; FILING DATE: 17-AUGUST-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/964,624
; FILING DATE: 21-OCTOBER-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/714,131
; FILING DATE: 10-JUNE-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Barry J. Swanson
; REGISTRATION NUMBER: 33,215
; REFERENCE/DOCKET NUMBER: NEX17/PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 793-3333
; TELEFAX: (303) 793-3433
; INFORMATION FOR SEQ ID NO: 80:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; PCT-US95-05600-80

```

```

Query Match 77.8%; Score 21; DB 5; Length 4;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 2 FGLM 5
Db 1 FGLM 4

```

```

RESULT 14
US-08-070-301-6
; Sequence 6, Application US/08070301
; Patent No. 5871995
; GENERAL INFORMATION:
; APPLICANT: IIDA, Toshio
; APPLICANT: KAMINUMA, Toshihiko
; APPLICANT: FUSE, Yuka
; APPLICANT: TAJIMA, Masahiro
; APPLICANT: YANAGI, Mitsuo
; APPLICANT: OKAMOTO, Hiroshi
; APPLICANT: KISHIMOTO, Jiro
; APPLICANT: IFUKU, Ohji
; APPLICANT: KATO, Ichiro
; TITLE OF INVENTION: ENZYME PARTICIPATING IN C-TERMINAL
; TITLE OF INVENTION: AMIDATION, AND METHOD OF PREPARING SAME AND USE THEREOF
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Wegner, Cantor, Mueller & Player, P.C.
; STREET: 1233 20th Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20036-8218
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/070,301
; FILING DATE: 24-MAY-1991
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 1-209687
; FILING DATE: 15-AUG-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 1-181933
; FILING DATE: 31-OCT-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 2-76331
; FILING DATE: 26-MAR-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 2-106412
; FILING DATE: 24-APR-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 2-205475
; FILING DATE: 02-AUG-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Player, William E.
; REGISTRATION NUMBER: 31,409
; REFERENCE/DOCKET NUMBER: P-450-22830
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 887-040
; TELEFAX: (202) 835-0605
; TELEX: 440706
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-070-301-6

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Query Match 77.8%; Score 21; DB 2; Length 5;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2 FGLM 5
Db 1 FGLM 4

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RESULT 15
US-07-753-909B-3
; Sequence 3, Application US/07753909B
; Patent No. 5304632
; GENERAL INFORMATION:
; APPLICANT: Vaudy, Hubert
; APPLICANT: Conlon, Michael J.
; TITLE OF INVENTION: Neuropeptides of the Tachykinin Family
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Zarley, McKee, Thomte, Voorhees, and Sease
; STREET: 801 Grand, Suite 3200
; CITY: Des Moines
; STATE: Iowa
; COUNTRY: United States
; ZIP: 50309
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/753,909B
; FILING DATE: 19910903
; CLASSIFICATION: 530

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;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: PR 9106759  
;; FILING DATE: 04-JUN-1991  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Sease, Edmund J.  
;; REGISTRATION NUMBER: 24,741  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (515)-288-3667  
;; TELEFAX: (515)-288-1338  
;; INFORMATION FOR SEQ ID NO: 3:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 5 amino acids  
;; TYPE: AMINO ACID  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: peptide  
;; FRAGMENT TYPE: C-terminal  
;; ORIGINAL SOURCE:  
;; ORGANISM: Rana ridibunda  
;; DEVELOPMENTAL STAGE: adult  
;; TISSUE TYPE: brain  
;;  
US-07-753-909B-3

Query Match 74.1%; Score 20; DB 1; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 1 FFGLM 5  
| | | |  
Db 1 FXGLM 5

Search completed: March 23, 2005, 14:50:58  
Job time : 31 secs



GenCore version 5.1.6.  
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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:38:05 ; Search time 23.5 Seconds  
(without alignments)  
20.472 Million cell updates/sec

Title: SEQ2  
Perfect score: 25  
Sequence: 1 fvglm 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 206

Minimum DB seq length: 0  
Maximum DB seq length: 5

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR 79:.\*  
1: pir1.\*  
2: pir2.\*  
3: pir3.\*  
4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	14	56.0	5	2 G44817	27.5 kda structural
2	14	56.0	5	2 I44817	27.5K structural p
3	14	56.0	5	2 I44817	27.5K structural p
4	14	56.0	5	2 C44817	28.5K structural p
5	14	56.0	5	2 A44817	28K structural pro
6	11	44.0	4	2 PT0240	Ig heavy chain CRD
7	11	44.0	5	2 A61445	Met-enkephalin - b
8	11	44.0	4	2 PT0278	Ig heavy chain CRD
9	10	40.0	4	2 A53284	T-cell receptor be
10	10	40.0	5	2 B61168	cocoonase (EC 3.4.
11	10	40.0	5	2 A44692	fulicin - giant Af
12	9	36.0	5	2 A32516	cholecystokinin-5
13	9	36.0	5	4 A58728	serawettin w2 - s
14	8	32.0	4	2 PT0633	T-cell receptor be
15	8	32.0	5	2 A44955	alkanal monooxygen
16	8	32.0	5	2 B61445	Leu-enkephalin - b
17	8	32.0	5	2 PT0572	T-cell receptor be
18	7	28.0	3	3 B23751	spinal cord peptid
19	7	28.0	4	2 T30569	hypothetical prote
20	7	28.0	4	2 I38888	COI intron 16 prot
21	7	28.0	4	2 A44823	synaptosomal-assoc
22	7	28.0	4	2 PL0140	carbon-monoxide de
23	7	28.0	4	2 A35779	neuropeptide Antho
24	7	28.0	4	2 A60418	FMRFamide - polych
25	7	28.0	4	2 PT0721	T-cell receptor be
26	7	28.0	4	2 A32039	tyrosine-melanocyt
27	7	28.0	4	2 ECKK	cardioexcitatory n
28	7	28.0	5	2 T10954	hypothetical prote
29	7	28.0	5	2 B45525	actin I - malaria

30 7 28.0 5 2 D44823 synaptosomal-assoc  
31 7 28.0 5 2 PT0713 T-cell receptor be  
32 7 28.0 5 2 S69237 surface protein te  
33 6 24.0 3 3 PT0636 T-cell receptor be  
34 6 24.0 3 3 PT0571 T-cell receptor be  
35 6 24.0 3 3 S68328 blood cell protein  
36 6 24.0 3 3 GKHU growth-modulating  
37 6 24.0 3 3 A60898 burrein - chicken  
38 6 24.0 3 3 A23751 spinal cord peptid  
39 6 24.0 4 1 ECKAA antho-kamide neur  
40 6 24.0 4 2 D41654 hypothetical prote  
41 6 24.0 4 2 S53508 starvation-induced  
42 6 24.0 4 2 A25844 autho-RF amide neu  
43 6 24.0 4 2 A34626 RPCH-related neuro  
44 6 24.0 4 2 S39390 myosin-light-chain  
45 6 24.0 4 2 S43959 Ig mu chain V regi

## ALIGNMENTS

## RESULT 1

G44817  
27.5 kda structural protein - Leuconostoc oenos phase P32 (fragment)  
C:Species: Leuconostoc oenos phase P32  
C:Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C:Accession: G44817  
R:Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A:Title: Lysozyme in Leuconostoc oenos.  
A:Reference number: A44817; MUID:92085033; PMID:1748868  
A:Accession: G44817  
A:Molecule type: protein  
A:Residues: 1-5 <ARE>  
A>Note: sequence extracted from NCBI backbone (NCBIP:70333)

Query Match 56.0%; Score 14; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VGL 4  
|||  
DB 3 VGL 5

## RESULT 2

I44817  
27.5K structural protein - Leuconostoc oenos phase P37 (fragment)  
C:Species: Leuconostoc oenos phase P37  
C:Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C:Accession: I44817  
R:Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A:Title: Lysozyme in Leuconostoc oenos.  
A:Reference number: A44817; MUID:92085033; PMID:1748868  
A:Accession: I44817  
A:Molecule type: protein  
A:Residues: 1-5 <ARE>  
A>Note: sequence extracted from NCBI backbone (NCBIP:70330)

Query Match 56.0%; Score 14; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VGL 4  
|||  
DB 3 VGL 5

## RESULT 3

E44817  
27.5K structural protein - Leuconostoc oenos phase P54 (fragment)  
C:Species: Leuconostoc oenos phase P54

C;Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C;Accession: E44817  
R;Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A;Title: Lysogeny in Leuconostoc oenos  
A;Reference number: A44817; MUID:92085033; PMID:1748868  
A;Accession: E44817  
A;Molecule type: protein  
A;Residues: 1-5 <ARE>  
A;Note: sequence extracted from NCBI backbone (NCBIP:70336)

Query Match 56.0%; Score 14; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VGL 4  
|||  
Db 3 VGL 5

RESULT 4  
C44817  
28.5K structural protein - Leuconostoc oenos phage PAT5-12 (fragment)  
C;Species: Leuconostoc oenos phage PAT5-12  
C;Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C;Accession: C44817  
R;Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A;Title: Lysogeny in Leuconostoc oenos.  
A;Reference number: A44817; MUID:92085033; PMID:1748868  
A;Accession: C44817  
A;Molecule type: protein  
A;Residues: 1-5 <ARE>  
A;Note: sequence extracted from NCBI backbone (NCBIP:70341)

Query Match 56.0%; Score 14; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VGL 4  
|||  
Db 3 VGL 5

RESULT 5  
A44817  
28K structural protein - Leuconostoc oenos phage PZt11-15 (fragment)  
C;Species: Leuconostoc oenos phage PZt11-15  
C;Date: 31-Mar-1993 #sequence\_revision 22-May-1998 #text\_change 22-May-1998  
C;Accession: A44817  
R;Arendt, E.K.; Lonvaud, A.; Hammes, W.P.  
J. Gen. Microbiol. 137, 2135-2139, 1991  
A;Title: Lysogeny in Leuconostoc oenos.  
A;Reference number: A44817; MUID:92085033; PMID:1748868  
A;Accession: A44817  
A;Molecule type: protein  
A;Residues: 1-5 <ARE>  
A;Note: sequence extracted from NCBI backbone (NCBIP:70343)

Query Match 56.0%; Score 14; DB 2; Length 5;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VGL 4  
|||  
Db 3 VGL 5

RESULT 6  
PT0240  
Ig heavy chain CRD3 region (clone 2-100B) - human (fragment)  
C;Species: Homo sapiens (man)  
C;Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-1996

C;Accession: PT0240  
R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.  
J. Exp. Med. 173, 395-407, 1991  
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and Jc  
A;Reference number: PT0222; MUID:91108337; PMID:1899102  
A;Accession: PT0240  
A;Molecule type: DNA  
A;Residues: 1-4 <YAM>  
A;Experimental source: B lymphocyte  
C;Keywords: heterotetramer; immunoglobulin

Query Match 44.0%; Score 11; DB 2; Length 5;  
Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGL 4  
: ||  
Db 1 YPGL 4

RESULT 7  
A61445  
Met-enkephalin - blue mussel  
C;Species: Mytilus edulis (blue mussel)  
C;Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 21-Jan-2000  
C;Accession: A61445  
R;Leung, M.K.; Stefano, G.B.  
Proc. Natl. Acad. Sci. U.S.A. 81, 955-958, 1984  
A;Title: Isolation and identification of enkephalins in pedal ganglia of Mytilus edulis  
A;Reference number: A61445; MUID:84144823; PMID:6583690  
A;Accession: A61445  
A;Molecule type: protein  
A;Residues: 1-5 <LEU>  
A;Experimental source: pedal ganglia  
C;Keywords: neuropeptide; opioid peptide

Query Match 44.0%; Score 11; DB 2; Length 5;  
Best Local Similarity 66.7%; Pred. No. 2.8e+05;  
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GLM 5  
|||  
Db 3 GFM 5

RESULT 8  
PT0278  
Ig heavy chain CRD3 region (clone 4-88) - human (fragment)  
C;Species: Homo sapiens (man)  
C;Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-1996  
C;Accession: PT0278  
R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.  
J. Exp. Med. 173, 395-407, 1991  
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and Jc  
A;Reference number: PT0222; MUID:91108337; PMID:1899102  
A;Accession: PT0278  
A;Molecule type: DNA  
A;Residues: 1-5 <YAM>  
A;Experimental source: B lymphocyte  
C;Keywords: heterotetramer; immunoglobulin

Query Match 44.0%; Score 11; DB 2; Length 5;  
Best Local Similarity 20.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
: ||:  
Db 1 YFGVL 5

RESULT 9  
A53284  
T-cell receptor beta 2 chain D region, Dbeta2 - rabbit



C:Species: Oryctolagus cuniculus (domestic rabbit)  
 C:Date: 02-May-1994 #sequence\_revision 18-Nov-1994 #text\_change 05-Nov-1999  
 C:Accession: A53284  
 R:Harindranath, N.; Alexander, C.B.; Mage, R.G.  
 Mol. Immunol. 28, 881-888, 1991  
 A:Title: Evolutionarily conserved organization and sequences of germline diversity and  
 A:Reference number: A53284; MUID:91342695; PMID:1678859  
 A:Accession: A53284  
 A>Status: preliminary  
 A:Molecule type: DNA  
 A:Residues: 1-4 <HAR>  
 A:CROSS-references: GB:S60737; NID:q233916; PIDN:AA819517.1; PID:q233917  
 A:Note: sequence extracted from NCBI backbone (NCBIN:60737, NCBIP:60739)  
 C:Keywords: T-cell receptor

Query Match 40.0%; Score 10; DB 2; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4  
 ||  
 Db 1 GL 2

RESULT 10  
 B61168  
 cocoonase (EC 3.4.21.-) - Chinese oak silkworm (fragment)  
 C:Species: Antheraea pernyi (Chinese oak silkworm)  
 C:Date: 10-Mar-1994 #sequence\_revision 10-Mar-1994 #text\_change 07-May-1999  
 C:Accession: B61168  
 R:Kramer, K.J.; Feist, R.L.; Law, J.H.  
 J. Biol. Chem. 248, 3021-3028, 1973  
 A:Title: Cocoonase. V. Structural studies on an insect serine protease.  
 A:Reference number: A61168; MUID:73166540; PMID:4735570  
 A:Accession: B61168  
 A:Molecule type: protein  
 A:Residues: 1-5 <KRA>  
 C:Keywords: hydrolase; serine proteinase; zymogen  
 F:1-5/Product: cocoonase (fragment) #status experimental <MAT>

Query Match 40.0%; Score 10; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VG 3  
 ||  
 Db 2 VG 3

RESULT 11  
 A44692  
 fulicin - giant African snail  
 C:Species: Achatina fulica (giant African snail)  
 C:Date: 23-Mar-1995 #sequence\_revision 05-Apr-1995 #text\_change 09-Jul-2004  
 C:Accession: A44692  
 R:Ohta, N.; Kubota, I.; Takao, T.; Shimonishi, Y.; Yasuda-Kamatani, Y.; Minakata, H.; No  
 Biochem. Biophys. Res. Commun. 178, 486-493, 1991  
 A:Title: Fulicin, a novel neuropeptide containing a D-amino acid residue isolated from  
 A:Reference number: A44692; MUID:91315471; PMID:1859408  
 A:Accession: A44692  
 A:Molecule type: protein  
 A:Residues: 1-5 <OHT>  
 A:CROSS-references: UNIPROT:P35905  
 C:Keywords: amidated carboxyl end; D-amino acid; neuropeptide  
 F:2/Modified site: D-asparagine (Asn) #status experimental  
 F:5/Modified site: amidated carboxyl end (Val) #status experimental

Query Match 40.0%; Score 10; DB 2; Length 5;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2  
 ||

Db 4 FV 5

RESULT 12  
 A32516  
 cholecystokinin-5 - dog  
 N:Alternate names: CCK-5  
 C:Species: Canis lupus familiaris (dog)  
 C:Date: 18-Oct-1989 #sequence\_revision 18-Oct-1989 #text\_change 18-Aug-2000  
 C:Accession: A32516  
 R:Shively, J.; Reeve Jr., J.R.; Eysselein, V.E.; Ben-Avram, C.; Vigna, S.R.; Walsh, J.H.  
 Am. J. Physiol. 252, G272-G275, 1987  
 A:Title: CCK-5: sequence analysis of a small cholecystokinin from canine brain and intest  
 A:Reference number: A32516; MUID:87153871; PMID:3826354  
 A:Accession: A32516  
 A:Molecule type: protein  
 A:Residues: 1-5 <SHI>  
 C:Comment: This peptide corresponds to the five carboxyl-terminal residues of cholecysto  
 C:Superfamily: gastrin  
 C:Keywords: amidated carboxyl end; neuropeptide  
 F:5/Modified site: amidated carboxyl end (Phe) #status experimental

Query Match 36.0%; Score 9; DB 2; Length 5;  
 Best Local Similarity 66.7%; Pred. No. 2.8e+05;  
 Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GLM 5  
 ||  
 Db 1 GWM 3

RESULT 13  
 A58728  
 serrawettin W2 - Serratia marcescens  
 C:Species: Serratia marcescens  
 C:Date: 10-Feb-1998 #sequence\_revision 12-Feb-1998 #text\_change 12-Feb-1998  
 C:Accession: A58728  
 R:Matsuyama, T.; Kaneda, K.; Nakagawa, Y.; Isa, K.; Hara-Hotta, H.; Yano, I.  
 J. Bacteriol. 174, 1769-1776, 1992  
 A:Title: A novel extracellular cyclic lipopeptide which promotes flagellum-dependent and  
 A:Reference number: A58728; MUID:92193260; PMID:1548227  
 A:Accession: A58728  
 A>Status: unencoded polypeptide  
 A:Molecule type: protein  
 A:Residues: 1-5 <MAT>  
 A:Experimental source: strain NS 25  
 C:Comment: A surfactant lipopeptide promoting flagellum-independent surface translocation  
 C:Keywords: blocked amino end; blocked carboxyl end; D-amino acid; lipoprotein; unencod  
 F:1/Modified site: D-leucine (Leu) #status experimental  
 F:4/Modified site: D-phenylalanine (Phe) #status experimental  
 F:1-5/Cross-link: 3-hydroxydecanoyl amino end, ester carboxyl end (Leu-Ile) #status exper

Query Match 36.0%; Score 9; DB 4; Length 5;  
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
 Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2  
 ||  
 Db 4 FI 5

RESULT 14  
 PT0633  
 T-cell receptor beta chain V-D-J region (120-2C) - mouse (fragment)  
 C:Species: Mus musculus (house mouse)  
 C:Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 09-Jul-2004  
 C:Accession: PT0633  
 R:Feeney, A.J.  
 J. Exp. Med. 174, 115-124, 1991  
 A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.  
 A:Reference number: PT0509; MUID:91277601; PMID:1711558  
 A:Accession: PT0633  
 A>Status: translation not shown

A:Molecule type: mRNA  
A:Residues: 1-4 <FEE>  
A:Cross-references: UNIPROT:Q8BIV7  
A:Experimental source: newborn thymus, strain BALB/c  
C:Keywords: T-cell receptor

Query Match 32.0%; Score 8; DB 2; Length 4;  
Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4  
|:  
Db 3 GI 4

RESULT 15  
A44955  
alkanal monooxygenase (FMN-linked) (EC 1.14.14.3) alpha chain - Vibrio harveyi (fragment)  
C:Species: Vibrio harveyi  
C:Date: 03-Jun-1993 #sequence\_revision 03-Jun-1993 #text\_change 26-May-2000  
C:Accession: A44955  
R:Paquette, O.; Tu, S.C.  
Photochem. Photobiol. 50, 817-825, 1989  
A:Title: Chemical modification and characterization of the alpha cysteine 106 at the Vib  
A:Reference number: A44955; MUID:90175700; PMID:2626493  
A:Accession: A44955  
A:Status: preliminary  
A:Molecule type: protein  
A:Residues: 1-5 <PAQ>  
C:Keywords: FMN; luminescence; monooxygenase; oxidoreductase

Query Match 32.0%; Score 8; DB 2; Length 5;  
Best Local Similarity 50.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4  
|:  
Db 2 GI 3

Search completed: March 23, 2005, 14:51:54  
Job time : 24.5 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:21:29 ; Search time 112.5 Seconds  
(without alignments)  
22.759 Million cell updates/sec

Title: SEQ2

Perfect score: 25

Sequence: 1 fvglm 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 53

Minimum DB seq length: 0

Maximum DB seq length: 5

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt\_03.\*

1: uniprot\_sprot.\*

2: uniprot\_trembl.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match %	Length	DB	ID	Description
1	16	64.0	5	1	TPIS_CANFA	P54714 canis famil
2	10	40.0	4	1	EOSI_HUMAN	P02731 homo sapien
3	10	40.0	5	1	AL14_CARMA	P81817 carcinus ma
4	10	40.0	5	1	E103_LITRU	P82099 litoria rub
5	10	40.0	5	1	RE32_LITRU	P82073 litoria rub
6	10	40.0	5	1	UF01_MOUSE	P38639 mus musculu
7	9	36.0	4	1	ILME_SEPOP	P83568 sepia offic
8	9	36.0	5	1	E104_LITRU	P82100 litoria rub
9	7	28.0	4	1	DCML_PSECH	P19916 pseudomonas
10	7	28.0	4	1	FLRF_HIRME	P42561 hirudo medi
11	7	28.0	4	1	FLRN_ATEL	P58707 anthopleura
12	7	28.0	4	1	FMRF_MACNI	P01162 macrocallis
13	6	24.0	2	1	GWA_SEPOP	P83570 sepia offic
14	6	24.0	3	1	GRW1_HUMAN	P01157 homo sapien
15	6	24.0	4	1	ACH1_ACHFU	P35904 achatina fu
16	6	24.0	4	1	FAR3_HIRME	P42562 hirudo medi
17	6	24.0	4	1	FAR4_HIRME	P42563 hirudo medi
18	6	24.0	4	1	FKKA_ATEL	P58705 anthopleura
19	6	24.0	4	1	FVRI_ATEL	P58706 anthopleura
20	6	24.0	4	1	OCPI_OCTMI	P58648 octopus min
21	6	24.0	4	1	OCPI_OCTMI	P58649 octopus min
22	6	24.0	4	2	Q16047	Q16047 homo sapien
23	6	24.0	5	1	AP21_EISFO	P84182 eisenia foe
24	6	24.0	5	1	FARP_ARTTR	P41853 artiposithi
25	6	24.0	5	1	FARP_CHICK	P83308 gallus gall
26	6	24.0	5	1	PAP2_PARMA	P81864 pardachirus
27	6	24.0	5	1	PKK DAUCA	P58261 daucus caro
28	6	24.0	5	1	RE11_LITRU	P82070 litoria rub
29	6	24.0	5	1	RE21_LITRU	P82071 litoria rub
30	6	24.0	5	1	RE31_LITRU	P82072 litoria rub
31	6	24.0	5	1	SUGA_ACHDO	P19991 acheta dome

32	6	24.0	5	1	UC22_MAIZE	P80628 zea mays (m
33	6	24.0	5	1	UXA4_CHLTR	P38005 chlamydia t
34	5	20.0	4	1	DCMS_PSECH	P19918 pseudomonas
35	5	20.0	4	2	Q96ATO	Q96ATO homo sapien
36	5	20.0	5	1	BIOA_CITPR	P13071 citrobacter
37	5	20.0	5	1	BIOB_CITPR	P12997 citrobacter
38	5	20.0	5	2	Q99007	Q99007 hordeum vul
39	5	20.0	5	2	P83073	P83073 bacillus ce
40	4	16.0	4	1	YLM1_YEAST	P36515 saccharomyc
41	4	16.0	4	2	Q08433	Q08433 rattus sp.
42	4	16.0	5	1	PRCT_CARMA	P67857 carcinus ma
43	4	16.0	5	1	PRCT_LIMPO	P67858 limulus pol
44	4	16.0	5	1	PRCT_PERAM	P67859 periplaneta
45	3	12.0	3	1	LUXE_VIBFI	P24272 vibrio fisc

#### ALIGNMENTS

RESULT 1  
TPIS\_CANFA STANDARD; PRT; 5 AA.  
ID TPIS\_CANFA  
AC P54714;  
DT 01-OCT-1996 (Rel. 34, Created)  
DT 01-OCT-1996 (Rel. 34, Last sequence update)  
DT 25-OCT-2004 (Rel. 45, Last annotation update)  
DE Triosephosphate isomerase (EC 5.3.1.1) (TIM) (Triose-phosphate  
DE isomerase) (Fragment).  
GN Name=TP11;  
OS Canis familiaris (Dog).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.  
OX NCBI\_TaxID=9615;  
RN [1]  
RP SEQUENCE.  
RC TISSUE=Heart;  
RX MEDLINE=98163340; PubMed=9504812;  
RA Dunn W.J., Corbett J.M., Wheeler C.H.;  
RT "HSC-2DPAGE and the two-dimensional gel electrophoresis database of  
RT dog heart proteins.";  
RL Electrophoresis 18:2795-2802(1997).  
CC -!- CATALYTIC ACTIVITY: D-glyceraldehyde 3-phosphate = glycerone  
CC phosphates.  
CC -!- PATHWAY: Plays an important role in several metabolic pathways.  
CC -!- SUBUNIT: Homodimer (By similarity).  
CC -!- SIMILARITY: Belongs to the triosephosphate isomerase family.  
DR HSC-2DPAGE; P54714; DOG.  
DR InterPro: IPR000652; Triophos ismrse.  
DR PROSITE; PS00171; TIM; PARTIAL.  
KW Direct protein sequencing; Fatty acid biosynthesis; Gluconeogenesis;  
KW Glycolysis; Isomerase; Pentose shunt.  
FT NON\_TER 1  
FT NON\_TER 5  
SQ SEQUENCE 5 AA; 550 MW; 64444862C9A00000 CRC64;

Query Match 64.0%; Score 16; DB 1; Length 5;  
Best Local Similarity 100.0%; Pred.No. 1.6e+06;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FVG 3  
|||  
Db 1 FVG 3

RESULT 2  
EOSI\_HUMAN STANDARD; PRT; 4 AA.  
ID EOSI\_HUMAN  
AC P02731;  
DT 21-JUL-1986 (Rel. 01, Created)  
DT 21-JUL-1986 (Rel. 01, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Bosinophilotoxic peptides.  
OS Homo sapiens (Human).

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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=76078412; PubMed=1060093;
RA Goetzl E.J., Austen K.F.;
RT "Purification and synthesis of eosinophilotoxic tetrapeptides of
RT human lung tissue: identification as eosinophil chemotactic factor of
RT anaphylaxis.";
RL Proc. Natl. Acad. Sci. U.S.A. 72:4123-4127(1975).
CC -!- MISCELLANEOUS; These peptides are released from mast cells in lung
CC (and other tissues) during hypersensitivity reactions
CC (anaphylaxis); their activities, preferentially affecting
CC eosinophils, include chemotaxis, chemotactic deactivation, release
CC of enzymes, and stimulation of the hexose monophosphate shunt.
DR GO:0006935; P:chemotaxis; IDA.
DR GO:0006955; P:immune response; IDA.
DR Direct protein sequencing.
KW VARIANT 1 1 V -> A (in other peptide).
FT MOD_RES 5 /FTID=VAR_005201.
SQ SEQUENCE 4 AA; 390 MW; 6B05B862A0000000 CRC64;

Query Match 40.0%; Score 10; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VG 3
DB 1 VG 2

RESULT 3
AL14_CARMA STANDARD; PRT; 5 AA.
ID P81817;
AC 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Carcunastatin 14.
OS Carcinus maenas (Common shore crab) (Green crab).
OC Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
OC Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;
OC Eubrachyura; Portunoidae; Portunidae; Carcinus.
OX NCBI_TaxID=6759;
RN [1]
RP SEQUENCE.
RC TISSUE=Cerebral ganglion, and Thoracic ganglion;
RX MEDLINE=98121193; PubMed=9461295;
RA Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Jaros P.P.,
RA Thorpe A.;
RT "Isolation and identification of multiple neuropeptides of the
RT allatostatatin superfamily in the shore crab Carcinus maenas.";
RL Eur. J. Biochem. 250:727-734(1997).
CC -!- FUNCTION: May act as a neurotransmitter or neuromodulator.
CC -!- SIMILARITY: Belongs to the allatostatatin family.
KW Amidation; Direct protein sequencing; Multigene family; Neuropeptide.
FT MOD_RES 5 Leucine amide (Potential).
SQ SEQUENCE 5 AA; 586 MW; 672879D5AB300000 CRC64;

Query Match 40.0%; Score 10; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GL 4
DB 4 GL 5

RESULT 4
EI03_LITRU STANDARD; PRT; 5 AA.
ID EI03_LITRU
AC P82099;

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RA Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
RT "Peptides from the skin glands of the Australian buzzing tree frog
RT Litoria rubella.";
RL Aust. J. Chem. 52:639-645(1999).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Skin.
KW Amidation; Amphibian defense peptide; Direct protein sequencing.
FT MOD_RES 5 Methionine amide.
SQ SEQUENCE 5 AA; 630 MW; 668761F2C9A00000 CRC64;

Query Match 40.0%; Score 10; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2
DB 1 FV 2

RESULT 5
RE32_LITRU STANDARD; PRT; 5 AA.
ID RE32_LITRU
AC P82073;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Rubellidin 3.2.
OS Litoria rubella (Desert tree frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RA Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
RT "Peptides from the skin glands of the Australian buzzing tree frog
RT Litoria rubella.";
RL Aust. J. Chem. 52:639-645(1999).
CC -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC activity.
CC -!- SUBCELLULAR LOCATION: Secreted.
KW Amidation; Direct protein sequencing.
FT MOD_RES 5 Leucine amide (Potential).
SQ SEQUENCE 5 AA; 570 MW; 71A9C9C862A00000 CRC64;

Query Match 40.0%; Score 10; DB 1; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 VG 3
DB 1 VG 2

RESULT 6
UF01_MOUSE STANDARD; PRT; 5 AA.
ID UF01_MOUSE
AC P38639;

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DT 01-OCT-1994 (Rel. 30, Created)
DT 01-OCT-1994 (Rel. 30, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Unknown protein from 2D-PAGE of fibroblasts (P19) (Fragment).
OS Mus musculus (Mouse).
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE.
RC TISSUE=Fibroblast;
RX MEDLINE=95009907; PubMed=75231108;
RA Merrick B.A., Patterson R.M., Wichter L.L., He C., Selkirk J.K.;
RT "Separation and sequencing of familial and novel murine proteins using
RT preparative two-dimensional gel electrophoresis.";
RL Electrophoresis 15:735-745(1994).
CC -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC protein is: 6.6, its MW is: 19 kDa.
KW Direct protein sequencing.
FT NON_TER 5
SQ SEQUENCE 5 AA; 717 MW; 7364087043100000 CRC64;

Query Match 40.0%; Score 10; DB 1; Length 5;
Best Local Similarity 33.3%; Pred. No. 1.6e+06;
Matches 1; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 FVG 3
DB 1 WIG 3

RESULT 7
ID ILME SEPOF STANDARD; PRT; 4 AA.
AC P83568;
DT 29-MAR-2004 (Rel. 43, Created)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Pheromone peptide ILME.
OS Sepia officinalis (Common cuttlefish).
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
OC Decapodiformes; Sepioidea; Sepiidae; Sepia.
OX NCBI_TaxID=6610;
RN [1]
RP SEQUENCE, SUBCELLULAR LOCATION, TISSUE SPECIFICITY, AND MASS
RP SPECTROMETRY.
RC TISSUE=Egg;
RX MEDLINE=20403899; PubMed=10944467; DOI=10.1006/bbrc.2000.3286;
RA Zatylny C., Gagnon J., Boucaud-Canou E., Henry J.;
RT "ILME: a waterborne pheromonal peptide released by the eggs of Sepia
RT officinalis.";
RL Biochem. Biophys. Res. Commun. 275:217-222(2000).
RN [2]
RP SEQUENCE.
RC TISSUE=Egg;
RX MEDLINE=22197108; PubMed=12207899; DOI=10.1016/S0006-291X(02)02036-3;
RA Zatylny C., Marvin L., Gagnon J., Henry J.;
RT "Fertilization in Sepia officinalis: the first mollusk sperm-
RT attracting peptide.";
RL Biochem. Biophys. Res. Commun. 296:1186-1193(2002).
CC -!- FUNCTION: Has myotropic activity targeting the genital tract.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Follicle, fully grown oocyte and egg(EC2).
CC -!- MASS SPECTROMETRY: MW=505.4; METHOD=MALDI; RANGE=1-4; NOTE=Ref.1.
KW Direct protein sequencing; Pheromone.
SQ SEQUENCE 4 AA; 505 MW; 5B16972030000000 CRC64;

Query Match 36.0%; Score 9; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 LM 5

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Db 2 LM 3

RESULT 8
ID E104 LITRU STANDARD; PRT; 5 AA.
AC P82100;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Electrin 4.
OS Litoria rubella (Desert tree frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC Pelodyadinae; Litoria.
OX NCBI_TaxID=104895;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RA Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
RT "Peptides from the skin glands of the Australian buzzing tree frog
RT Litori electrica. Comparison with the skin peptides from Litoria
RT rubella.";
RL Aust. J. Chem. 52:639-645(1999).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Skin.
KW Amidation; Amphibian defense peptide; Direct protein sequencing.
FT MOD_RES 5
FT Histidine amide.
SQ SEQUENCE 5 AA; 616 MW; 61F2D1A059A00000 CRC64;

Query Match 36.0%; Score 9; DB 1; Length 5;
Best Local Similarity 50.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2
DB 1 FI 2

RESULT 9
ID DCML PSECH STANDARD; PRT; 4 AA.
AC P19516;
DT 01-FEB-1991 (Rel. 17, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Carbon monoxide dehydrogenase large chain (EC 1.2.99.2) (CO
DE dehydrogenase subunit L) (CO-DH L) (Fragment).
GN Name=cutL;
OS Pseudomonas carboxydohydrogena.
OC Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
OC Bradyrhizobiaceae.
OX NCBI_TaxID=290;
RN [1]
RP SEQUENCE.
RX MEDLINE=90055678; PubMed=2818128;
RA Kraut M., Hugendieck I., Herwig S., Meyer O.;
RT "Homology and distribution of CO dehydrogenase structural genes in
RT carboxydohydrogenic bacteria.";
RL Arch. Microbiol. 152:335-341(1989).
CC -!- FUNCTION: Catalyzes the oxidation of carbon monoxide to carbon
CC dioxide.
CC -!- CATALYTIC ACTIVITY: CO + H(2)O + A = CO(2) + AH(2).
CC -!- COFACTOR: Binds 1 copper(I) ion, 1 molybdenum(VI) ion and 1
CC molybdopterin cytosine dinucleotide (MCD) per subunit.
CC -!- SUBUNIT: Heterotrimer consisting of a large, a medium and a small
CC subunit.
DR PIR; P0140; P0140.
KW Direct protein sequencing; Molybdenum; Oxidoreductase.
FT NON_TER 4
FT SEQUENCE 4 AA; 441 MW; 7761E876F0000000 CRC64;

Query Match 28.0%; Score 7; DB 1; Length 4;

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Best Local Similarity 50.0%; Pred. No. 1.6e+06;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 VG 3  
Db 1 MG 2

RESULT 10  
FLRF\_HIRME  
ID FLRF\_HIRME STANDARD; PRT; 4 AA.  
AC P42561;  
DT 01-NOV-1995 (Rel. 32, Created)  
DT 01-NOV-1995 (Rel. 32, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE FIRFamide.  
OS Hirudo medicinalis (Medicinal leech), and  
OC Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;  
OC Arhynchobdellida; Hirudiniiformes; Hirudinidae; Hirudo.  
OX NCBI\_TaxID=6421, 27815;  
RN [1]  
RP SEQUENCE.  
RC SPECIES=H. medicinalis;  
RX MEDLINE=92195954; PubMed=1686933; DOI=10.1016/0196-9781(91)90035-N;  
RA Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;  
RT "Identification of RFamide neuropeptides in the medicinal leech.";  
RL Peptides 12:897-908(1991).  
RN [2]  
RP SEQUENCE.  
RC SPECIES=H. trivoltis; TISSUE=Kidney;  
RX MEDLINE=94286417; PubMed=7912428; DOI=10.1016/0196-9781(94)90166-X;  
RA Madrid K.P., Price D.A., Greenberg M.J., Khan H.R., Saleuddin A.S.M.;  
RT "FMRFamide-related peptides from the kidney of the snail, Helisoma  
trivoltis";  
RL Peptides 15:31-36(1994).  
RN [3]  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- TISSUE SPECIFICITY: Neuron specific.  
CC -!- MASS SPECTROMETRY: MW=549.3; METHOD=PAB; RANGE=1-4; NOTE=Ref.1.  
KW Amidation; Direct protein sequencing; Neuropeptide.  
FT MOD\_RES 4 4 Phenylalanine amide.  
SQ SEQUENCE 4 AA; 582 MW; 69D40729A0000000 CRC64;

Query Match 28.0%; Score 7; DB 1; Length 4;  
Best Local Similarity 50.0%; Pred. No. 1.6e+06;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2  
Db 1 FL 2

RESULT 11  
FLRN\_ANTEL  
ID FLRN\_ANTEL STANDARD; PRT; 4 AA.  
AC P58707;  
DT 28-FEB-2003 (Rel. 41, Created)  
DT 28-FEB-2003 (Rel. 41, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Anthopleura elegantissima (Sea anemone).  
OC Eukaryota; Metazoa; Cnidaria; Anthozoa; Zoantharia; Actiniaria;  
OC Nyantheae; Actiniidae; Anthopleura.  
OX NCBI\_TaxID=6110;  
RN [1]  
RP SEQUENCE, AND MASS SPECTROMETRY.  
RX MEDLINE=90319122; PubMed=1973541;  
RA Grimmelikhuijzen C.J.P., Rinehart K.L. Jr., Jacob E., Graff D.,  
RA Reinscheid R.K., Nohacker H.P., Staley A.L.;  
RT "Isolation of L-3-phenylacetyl-leu-Arg-Asn-NH2 (Antho-RNamide), a sea  
anemone neuropeptide containing an unusual amino-terminal blocking  
group.";  
RL Proc. Natl. Acad. Sci. U.S.A. 87:5410-5414(1990).

Query Match 28.0%; Score 7; DB 1; Length 4;  
Best Local Similarity 50.0%; Pred. No. 1.6e+06;  
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2  
Db 1 FL 2

RESULT 12  
FMRF\_MACNI  
ID FMRF\_MACNI STANDARD; PRT; 4 AA.  
AC P01162;  
DT 21-JUL-1986 (Rel. 01, Created)  
DT 21-JUL-1986 (Rel. 01, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE FMRFamide (Peak C) (Cardioexcitatory neuropeptide).  
OS Macrocallista nimbosa (Sun-ray clam),  
OS Nereis virens (Sandworm),  
OS Hirudo medicinalis (Medicinal leech), and  
OS Helisoma trivoltis (Snail).  
OC Eukaryota; Metazoa; Mollusca; Bivalvia; Heteroconchia; Veneroidea;  
OC Veneroidea; Veneridae; Macrocallista.  
OX NCBI\_TaxID=6594, 6353, 6421, 27815;  
RN [1]  
RP SEQUENCE, AND SYNTHESIS.  
RC SPECIES=M. nimbosa; TISSUE=Cerebral pedal, and Visceral ganglion;  
RX MEDLINE=77215956; PubMed=877582;  
RA Price D.A., Greenberg M.J.;  
RT "Structure of a molluscan cardioexcitatory neuropeptide.";  
RL Science 197:670-671(1977).  
RN [2]  
RP SEQUENCE, AND CHARACTERIZATION.  
RC SPECIES=M. nimbosa; TISSUE=Ganglion;  
RX MEDLINE=78012038; PubMed=909875;  
RA Price D.A., Greenberg M.J.;  
RT "Purification and characterization of a cardioexcitatory neuropeptide  
from the central ganglia of a bivalve mollusc.";  
RL Prep. Biochem. 7:261-281(1977).  
RN [3]  
RP SEQUENCE.  
RC SPECIES=N. virens;  
RX MEDLINE=90259866; PubMed=2342992; DOI=10.1016/0196-9781(90)90113-J;  
RA Krajniak K.G., Price D.A.;  
RT "Authentic FMRFamide is present in the polychaete Nereis virens.";  
RL Peptides 11:75-77(1990).  
RN [4]  
RP SEQUENCE.  
RC SPECIES=H. medicinalis;  
RX MEDLINE=92195954; PubMed=1686933; DOI=10.1016/0196-9781(91)90035-N;  
RA Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;  
RT "Identification of RFamide neuropeptides in the medicinal leech.";  
RL Peptides 12:897-908(1991).  
RN [5]  
RP SEQUENCE.  
RC SPECIES=H. trivoltis; TISSUE=Kidney;  
RX MEDLINE=94286417; PubMed=7912428; DOI=10.1016/0196-9781(94)90166-X;  
RA Madrid K.P., Price D.A., Greenberg M.J., Khan H.R., Saleuddin A.S.M.;  
RT "FMRFamide-related peptides from the kidney of the snail, Helisoma  
trivoltis";  
RL Peptides 15:31-36(1994).  
RN [6]  
CC -!- FUNCTION: Myoactive; cardioexcitatory substance. Pharmacological  
activities include augmentation, induction, and regularization of  
cardiac contraction.

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CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the FARP (FMRPamide related peptide)
CC family.
DR PIR; A01426; ECN.
DR PIR; A60418; A60418.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD_RES 4 4 Phenylalanine amide.
SQ SEQUENCE 4 AA; 600 MW; 69D40699A00000000 CRC64;

Query Match 28.0%; Score 7; DB 1; Length 4;
Best Local Similarity 50.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FV 2
DB 1 FM 2

RESULT 13
GWA_SEPOF STANDARD; PRT; 2 AA.
AC P83570;
DT 29-MAR-2004 (Rel. 43, Created)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Neuropeptide Gwa.
OS Sepia officinalis (Common cuttlefish).
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
OC Decapodiformes; Sepioidea; Sepiidae; Sepia.
OX NCBI_TaxID=6610;
RN [1]
RP SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND AMIDATION.
RC TISSUE=Optic lobe;
RX MEDLINE=98100358; PubMed=9437704; DOI=10.1016/S0196-9781(97)00241-6;
RA Henry J., Favrel P., Boucaud-Camou E.;
RT "Isolation and identification of a novel Ala-Pro-Gly-Trp-amide-related
RT peptide inhibiting the motility of the mature oviduct in the
RT cuttlefish, Sepia officinalis."
RL Peptides 18:1469-1474(1997).
CC -!- FUNCTION: Regulatory neuropeptide with myotrophic activity
CC targeting the distal oviduct. Inhibits the motility of the oviduct
CC by decreasing tonus, frequency and amplitude of contractions.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- MASS SPECTROMETRY: MW=259.9; METHOD=WALDI; RANGE=1-2; NOTE=Ref.1.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD_RES 2 2 Tryptophan amide.
SQ SEQUENCE 2 AA; 261 MW; 7378100000000000000 CRC64;

Query Match 24.0%; Score 6; DB 1; Length 2;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 G 3
DB 1 G 1

RESULT 14
GRWM_HUMAN STANDARD; PRT; 3 AA.
AC P01157;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Growth-modulating peptide.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=77162369; PubMed=858356;
RA Schlesinger D.H., Pickart L., Thaler M.M.;

"RT "Growth-modulating serum tripeptide is glycyl-histidyl-lysine.";
RL Experientia 33:324-325(1977).
CC -!- MISCELLANEOUS: This serum tripeptide has been found to stimulate
CC growth of some cell types and to inhibit other types in vitro.
DR GO; GO:0001558; P:regulation of cell growth; NAS.
KW Direct protein sequencing.
SQ SEQUENCE 3 AA; 340 MW; 6331E8100000000000000 CRC64;

Query Match 24.0%; Score 6; DB 1; Length 3;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 G 3
DB 1 G 1

RESULT 15
ACH1_ACHF STANDARD; PRT; 4 AA.
ID ACH1_ACHF
AC P35904;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Achatin-I
OS Achatina fulica (Giant African snail).
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata; Stylommatophora;
OC Sigurethra; Achatinoidea; Achatinidae; Achatina.
OX NCBI_TaxID=6530;
RN [1]
RP SEQUENCE, CHARACTERIZATION, AND SYNTHESIS.
RC STRAIN=Perussac; TISSUE=Ganglion;
RX MEDLINE=89273551; PubMed=2597281;
RA Kamatani Y., Minakata H., Kenny P.T.M., Iwashita T., Watanabe K.,
RA Funase K., Sun X.P., Yongsiri A., Kim K.H., Navales-Li P.,
RA Navales E.T., Kanapi C.G., Takeuchi H., Nomoto K.;
RT "Achatin-I, an endogenous neuroexcitatory tetrapeptide from Achatina
RT fulica Ferussac containing a D-amino acid residue."
RL Biochem. Biophys. Res. Commun. 160:1015-1020(1989).
RN [2]
RP CHARACTERIZATION.
RC STRAIN=Perussac; TISSUE=Heart atrium;
RX MEDLINE=91264856; PubMed=1675568;
RA Fujimoto K., Kubota I., Yasuda-Kamatani Y., Minakata H., Nomoto K.,
RA Yoshida M., Harada A., Muneoka Y., Kobayashi M.;
RT "Purification of achatin-I from the atria of the African giant snail,
RT Achatina fulica, and its possible function."
RL Biochem. Biophys. Res. Commun. 177:847-853(1991).
RN [3]
RP CRYSTALLIZATION.
RX MEDLINE=93014529; PubMed=1399265;
RA Ishida T., In Y., Doi M., Inoue M., Yasuda-Kamatani Y., Minakata H.,
RA Iwashita T., Nomoto K.;
RT "Crystal structure and molecular conformation of achatin-I (H-Gly-D-
RT Phe-Ala-Asp-OH), an endogenous neuropeptide containing a D-amino acid
RT residue."
RL Int. J. Pept. Protein Res. 39:258-264(1992).
CC -!- FUNCTION: Neuroexcitatory peptide; increases the impulse frequency
CC and produces a spike broadening of the identified heart excitatory
CC neuron (PON); also enhances the amplitude and frequency of the
CC heart beat. Has also an effect on several other muscles.
DR PIR; A32480; A32480.
KW D-amino acid; Direct
FT MOD_RES 2 2 D-phenylalanine.
SQ SEQUENCE 4 AA; 408 MW; 6AADD9C8100000000000000 CRC64;

Query Match 24.0%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 G 3
DB 1 G 1

```

Wed Mar 23 15:33:44 2005

seq2.rup

Page 6

Search completed: March 23, 2005, 14:49:56  
Job time : 112.5 secs



GenCore version 5.1.1.6  
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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:20:03 ; Search time 120.5 Seconds  
(without alignments)  
16.048 Million cell updates/sec

Title: SEQ2  
Perfect score: 25  
Sequence: 1 fvglm 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 45841

Minimum DB seq length: 0  
Maximum DB seq length: 5

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Match	Length	DB ID	Description
1	25	100.0	5	4	AAB82430	Aab82430 Fluorinat
2	25	100.0	5	4	AAB82431	Aab82431 Fluorinat
3	20	80.0	5	2	AAR33009	Aar33009 Alpha-sub
4	20	80.0	5	2	AAR33008	Aar33008 Alpha-sub
5	20	80.0	5	2	AAR33007	Aar33007 Alpha-sub
6	20	80.0	5	2	AAR33010	Aar33010 Alpha-sub
7	20	80.0	5	2	AAR80134	Aar80134 COOH-term
8	20	80.0	5	2	AAR54549	Aar54549 Cholecyst
9	20	80.0	5	2	AAR54551	Aar54551 Cholecyst
10	20	80.0	5	2	AAR54550	Aar54550 Cholecyst
11	20	80.0	5	2	AAR54548	Aar54548 Cholecyst
12	20	80.0	5	2	AAR41687	Aar41687 Tetrapt
13	20	80.0	5	2	AAR99643	Aar99643 Substance
14	20	80.0	5	2	AAY50325	Aay50325 Neutroph
15	20	80.0	5	2	AAW92660	Aaw92660 Human tac
16	20	80.0	5	3	AAB23028	Aab23028 Mammalian
17	20	80.0	5	3	AAB23025	Aab23025 Human/rat
18	20	80.0	5	3	AAY67576	Aay67576 P antagonist
19	20	80.0	5	4	AAB66674	Aab66674 C-termina
20	20	80.0	5	4	AAB91428	Aab91428 Tachykini
21	20	80.0	5	4	AAB70556	Aab70556 Octopus t
22	20	80.0	5	5	AAU10880	Aau10880 Human bet
23	20	80.0	5	5	ABB10088	Abb10088 Substance
24	20	80.0	5	5	AAU77847	Aau77847 Tachykini
25	20	80.0	5	5	AAU77845	Aau77845 Tachykini

26	20	80.0	5	7	ADC64000	Adc64000 Tachykini
27	20	80.0	5	7	AD94203	Ad94203 High acti
28	20	80.0	5	7	ADF92530	Adf92530 Substance
29	20	80.0	5	8	ADN12180	Adn12180 Tachykini
30	20	80.0	5	8	ADN95078	Adn95078 Mammalian
31	20	80.0	5	8	ADR43774	Adr43774 Mammalian
32	20	80.0	5	8	ADR43771	Adr43771 Human mag
33	19	76.0	4	2	AAW41684	Aaw41684 Tetrapt
34	19	76.0	5	2	AAR27817	Aar27817 SEC bindi
35	19	76.0	5	3	AAB26271	Aab26271 Human alp
36	19	76.0	5	3	AAB26299	Aab26299 Human alp
37	19	76.0	5	5	AAG80461	Aag80461 Enzyme cl
38	18	72.0	4	2	AAW41685	Aaw41685 Tetrapt
39	18	72.0	4	4	AAB91795	Aab91795 Amyloid b
40	18	72.0	4	4	AAB91822	Aab91822 Amyloid b
41	18	72.0	5	4	AAB91821	Aab91821 Amyloid b
42	18	72.0	5	4	AAW91794	Aaw91794 Amyloid b
43	17	68.0	5	1	AAW20392	Aaw20392 Analgesic
44	17	68.0	5	2	AAW92702	Aaw92702 Human tac
45	17	68.0	5	4	AAG99346	Aag99346 Atypical

## ALIGNMENTS

## RESULT 1

AAB82430  
ID AAB82430 standard; peptide; 5 AA.

XX AAB82430;  
XX

DT 22-AUG-2001 (first entry)

DE Fluorinated neurokinin A antagonist intermediate.

XX Neurokinin A; fluorinated peptide; antagonist; immunosuppressive;  
KW antiarthritic; antiaesthetic; antiinflammatory; antiarthritic; analgesic;  
KW antitumor; anticonvulsant; nootropic; antipsychotic; antimigraine;  
KW asthma; therapy.

XX Synthetic.

XX Key Location/Qualifiers

FT Modified-site 1..2 /note= "the peptide bond is replaced by CH2-N(CH2CF3)"

FT Modified-site 1

FT Modified-site 5 /note= "Boc-Phe"

FT Modified-site 5 /note= "C-terminal amide"

FT US6218364-B1.

XX 17-APR-2001.

XX 26-APR-1996; 96US-00638407.

XX 20-JUN-1988; 88US-00208926.

PR 24-FEB-1989; 89US-00315202.

PR 23-MAY-1989; 89US-00356031.

PR 17-APR-1991; 91US-00686593.

PR 31-MAY-1991; 91US-00709092.

PR 19-MAR-1993; 93US-00033987.

PR 29-JUL-1994; 94US-000282341.

XX (HARB/) HARBESON S L.

XX (MCCA/) MCCARTHY J R.

XX Harbeson SL, McCarthy JR;

XX WPI; 2001-366135/38.

XX New peptide derivative useful as immunosuppressants and in treating subjects with various conditions, e.g. asthma.

peptide is a specifically claimed example of a group of generically claimed mono-, di-, tri-, tetra- and penta-peptides which include a substituent on an alpha-C atom in the chain. Such substitution may modify

CC the bioavailability, stability or absorbability of the peptide and hence  
 CC may improve the activity of the peptide as a drug. Depending on the  
 CC nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
 CC peptide, etc.), the modified peptides are variously useful for treating  
 CC obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
 CC addictive drug withdrawal symptoms, hypertension, heart failure,  
 CC cognition or memory disorders, spasticity, depression, diabetes, cancer,  
 CC asthma, bladder dysfunction, psychosis and arthritis; and as  
 CC contraceptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 5 AA;

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
 |  
 |  
 |  
 |  
 Db 1 FVGLM 5

RESULT 4  
 AAR33008  
 ID AAR33008 standard; peptide; 5 AA.  
 XX  
 AC AAR33008;

XX 25-MAR-2003 (revised)  
 DT 02-APR-1993 (first entry)  
 XX Alpha-substituted short peptide.

DE CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;  
 KW improved bioavailability.  
 XX Synthetic.

XX Key Location/Qualifiers  
 FH Modified-site 2 /note= "alpha-Me-Phe"  
 FT Modified-site 5 /note= "Met-NH2"  
 FT

XX WO9219254-A1.

XX 12-NOV-1992.

XX 15-APR-1992; 92WO-US003119.

XX 24-APR-1991; 91US-00690755.

PR 20-MAR-1992; 92US-00852086.

XX (WARN ) WARNER LAMBERT CO.

XX Horwell DC, Hughes J, Richardson RS, Howson W;

XX WPI; 1992-398522/48.

XX New alpha-substd. polypeptide are e.g. selective receptor ligands - for  
 PT treating inflammation, pain, stroke, ulcers, hypertension, heart failure,  
 PT depression, cancer, asthma, psychosis, arthritis, etc.

XX Claim 3; Page 41; 46pp; English.

XX The peptide is a specifically claimed example of a group of generically  
 CC claimed mono-, di-, tri-, tetra- and penta-peptides which include a  
 CC substituent on an alpha-C atom in the chain. Such substitution may modify  
 CC the bioavailability, stability or absorbability of the peptide and hence  
 CC may improve the activity of the peptide as a drug. Depending on the  
 CC nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
 CC peptide, etc.), the modified peptides are variously useful for treating

CC obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
 CC addictive drug withdrawal symptoms, spasticity, depression, heart failure,  
 CC cognition or memory disorders, psychosis and arthritis; and as  
 CC asthma, bladder dysfunction, psychosis and arthritis; and as  
 CC contraceptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 5 AA;

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
 |  
 |  
 |  
 |  
 Db 1 FVGLM 5

RESULT 5  
 AAR33007  
 ID AAR33007 standard; peptide; 5 AA.  
 XX  
 AC AAR33007;

XX 25-MAR-2003 (revised)  
 DT 02-APR-1993 (first entry)  
 XX Alpha-substituted short peptide.

DE CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;  
 KW improved bioavailability.  
 XX Synthetic.

XX Key Location/Qualifiers  
 FH Modified-site 1 /note= "alpha-Me-Phe"  
 FT Modified-site 5 /note= "Met-NH2"  
 FT

XX WO9219254-A1.

XX 12-NOV-1992.

XX 15-APR-1992; 92WO-US003119.

XX 24-APR-1991; 91US-00690755.

PR 20-MAR-1992; 92US-00852086.

XX (WARN ) WARNER LAMBERT CO.

XX Horwell DC, Hughes J, Richardson RS, Howson W;

XX WPI; 1992-398522/48.

XX New alpha-substd. polypeptide are e.g. selective receptor ligands - for  
 PT treating inflammation, pain, stroke, ulcers, hypertension, heart failure,  
 PT depression, cancer, asthma, psychosis, arthritis, etc.

XX Claim 3; Page 41; 46pp; English.

XX The peptide is a specifically claimed example of a group of generically  
 CC claimed mono-, di-, tri-, tetra- and penta-peptides which include a  
 CC substituent on an alpha-C atom in the chain. Such substitution may modify  
 CC the bioavailability, stability or absorbability of the peptide and hence  
 CC may improve the activity of the peptide as a drug. Depending on the  
 CC nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
 CC peptide, etc.), the modified peptides are variously useful for treating  
 CC obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
 CC addictive drug withdrawal symptoms, spasticity, depression, heart failure,  
 CC cognition or memory disorders, spasticity, depression, diabetes, cancer,  
 CC asthma, bladder dysfunction, psychosis and arthritis; and as

CC contraptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)  
 XX Sequence 5 AA;  
 SQ

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
 DB 1 FFGLM 5

RESULT 6  
 AAR33010  
 ID AAR33010 standard; peptide; 5 AA.  
 XX AC AAR33010;  
 XX DT 25-MAR-2003 (revised)  
 DT 02-APR-1993 (first entry)  
 XX DE Alpha-substituted short peptide.  
 XX CCK; neuropeptide; endorphin; hormone; LHRH; contraception; analgesia;  
 KW improved bioavailability.  
 KW Synthetic.  
 OS

FH Key Location/Qualifiers  
 FT Modified-site 5 /note= "alpha-Me-Met-NH2"  
 FT  
 XX W09219254-A1.  
 XX 12-NOV-1992.  
 XX 15-APR-1992; 92WO-US003119.  
 XX 24-APR-1991; 91US-00690755.  
 XX 20-MAR-1992; 92US-00852086.  
 XX (WARN ) WARNER LAMBERT CO.  
 XX Horwell DC, Hughes J, Richardson RS, Howson W;  
 PI WPI; 1992-398522/48.  
 DR  
 XX New alpha-subst. polypeptide are e.g. selective receptor ligands - for  
 PT treating inflammation, pain, stroke, ulcers, hypertension, heart failure,  
 PT depression, cancer, asthma, psychosis, arthritis, etc.  
 XX  
 PS Claim 3; Page 41; 46pp; English.

The peptide is a specifically claimed example of a group of generically  
 CC claimed mono-, di-, tri-, tetra- and penta-peptides which include a  
 CC substituent on an alpha-C atom in the chain. Such substitution may modify  
 CC the bioavailability, stability or absorbability of the peptide and hence  
 CC may improve the activity of the peptide as a drug. Depending on the  
 CC nature of the parent peptide (hormone, endorphin, CCK, NK2, chemotactic  
 CC peptide, etc.), the modified peptides are variously useful for treating  
 CC obesity, anxiety, gastrointestinal ulcers, pain, stroke, inflammation,  
 CC addictive drug withdrawal symptoms, hypertension, heart failure,  
 CC cognition or memory disorders, spasticity, depression, diabetes, cancer,  
 CC asthma, bladder dysfunction, psychosis and arthritis; and as  
 CC contraptives. (Updated on 25-MAR-2003 to correct PN field.) (Updated on  
 CC 25-MAR-2003 to correct PD field.) (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)  
 XX Sequence 5 AA;  
 SQ

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
 DB 1 FFGLM 5

RESULT 7  
 AAW80134  
 ID AAW80134 standard; peptide; 5 AA.  
 XX AC AAW80134;  
 XX DT 17-DEC-1998 (first entry)  
 DT COOH-terminal sequence of the tachykinin family.  
 XX Human; neurokinin receptor; NK-2; neurokinin A neurotransmitter;  
 KW abnormal smooth muscle cell contraction; asthma; PCR primer;  
 KW gastrointestinal disorder; peptic ulcer; ulcerative colitis.  
 XX Unidentified.  
 OS

FH Key Location/Qualifiers  
 FT Misc-difference 2 /note= "Phe, Tyr, Val or Ile"  
 FT  
 XX W09216220-A1.  
 XX 01-OCT-1992.  
 XX 13-MAR-1992; 92WO-US002017.  
 XX 15-MAR-1991; 91US-00670066.  
 XX (CHIL-) CHILDRENS MEDICAL CENT.  
 XX Gerard NP, Gerard C;  
 XX WPI; 1992-348932/42.  
 XX Human recombinant neurokinin NK-2 receptor - antagonises interaction of  
 PT neurokinin A and its receptor, useful for treating asthma and ulcerative  
 PT colitis, etc.  
 XX Disclosure; Page 1; 43pp; English.

The present sequence represents the COOH-terminal sequence of the  
 CC tachykinin family. The specification describes a human recombinant  
 CC neurokinin (NK-2) receptor protein. The human NK-2 receptor gene was  
 CC cloned from human tracheal tissue from an individual with cystic  
 CC fibrosis. The coding sequence is interrupted by four introns. The protein  
 CC can be used to screen for compounds that antagonise the interaction  
 CC between neurokinin A neurotransmitter and its NK-2 receptor. The protein  
 CC is thus useful for treating disorders associated with abnormal smooth  
 CC muscle cell contraction, particularly asthma and gastrointestinal  
 CC disorders such as peptic ulcers and ulcerative colitis  
 XX Sequence 5 AA;  
 SQ

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
 DB 1 FXGLM 5

RESULT 8  
 AARS4549

```

ID AAR54549 standard; peptide; 5 AA.
XX
AC AAR54549;
XX
DT 25-MAR-2003 (revised)
DT 14-DEC-1994 (first entry)
XX
DE Cholecystokinin analogue peptide #42.
XX
KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;
KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;
KW heart failure; cognition; memory enhancement; spasticity; depression;
KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 2
FT /label= MePhe
FT Modified-site 5
FT /note= "Amidated C-terminal"
XX
XX WO9409031-A1.
XX
XX 28-APR-1994.
XX
XX 14-OCT-1993; 93WO-US009809.
XX
XX 19-OCT-1992; 92US-00963169.
XX
XX 08-OCT-1993; 93US-00131693.
XX
XX (WARN ) WARNER LAMBERT CO.
XX
XX Horwell DC, Howson W, Hugues J, Richardson RS;
XX WPI; 1994-151243/18.
XX
XX New cholecystokinin analogues - useful e.g. in treatment of pain,
XX obesity, stroke, anxiety, and gastrointestinal ulcers.
XX
XX Claim 3; Page 66; 73pp; English.
XX
XX The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues
XX of cholecystokinin (CCK) which can be used to treat obesity, anxiety,
XX gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart
XX failure, cognition, memory enhancement, spasticity, depression, diabetes,
XX cancers, asthma, bladder dysfunction, psychosis, arthritis and in the
XX treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN
XX field.)
XX
SQ Sequence 5 AA;
XX
Query Match 80.0%; Score 20; DB 2; Length 5;
Best Local Similarity 80.0%; Pred No. 1.8e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy 1 FVGLM 5
Db 1 FFGLM 5
XX
RESULT 10
AAR54550
ID AAR54550 standard; peptide; 5 AA.
XX
AC AAR54550;
XX
XX 25-MAR-2003 (revised)
DT 14-DEC-1994 (first entry)
XX
XX Cholecystokinin analogue peptide #43.
XX
KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;
KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;
KW heart failure; cognition; memory enhancement; spasticity; depression;
KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 3
FT /label= MeLeu
FT Modified-site 5
FT /note= "Amidated C-terminal"
XX

```

XX WO9409031-A1.  
 XX  
 PD 28-APR-1994.  
 XX  
 PF 14-OCT-1993; 93WO-US009809.  
 XX  
 PR 19-OCT-1992; 92US-00963169.  
 PR 08-OCT-1993; 93US-00131693.  
 XX  
 PA (WARN ) WARNER LAMBERT CO.  
 XX  
 PI Horwell DC, Howson W, Hugues J, Richardson RS;  
 DR WPI; 1994-151243/18.  
 XX  
 PT New cholecystokinin analogues - useful e.g. in treatment of pain,  
 PT obesity, stroke, anxiety, and gastrointestinal ulcers.  
 XX  
 PS Claim 3; Page 66; 73pp; English.  
 XX  
 CC The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues  
 CC of cholecystokinin (CCK) which can be used to treat obesity, anxiety,  
 CC gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart  
 CC failure, cognition, memory enhancement, spasticity, depression, diabetes,  
 CC cancers, asthma, bladder dysfunction, psychosis, arthritis and in the  
 CC treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX  
 SQ Sequence 5 AA;  
 XX  
 CC Query Match 80.0%; Score 20; DB 2; Length 5;  
 CC Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 CC Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 FVGLM 5  
 Db 1 FFGLM 5  
 XX  
 RESULT 11  
 AAR54548  
 ID AAR54548 standard; peptide; 5 AA.  
 XX  
 AC AAR54548;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 14-DEC-1994 (first entry)  
 XX  
 DE Cholecystokinin analogue peptide #41.  
 XX  
 KW Peptide analogue; peptoid; cholecystokinin; CCK; obesity; anxiety;  
 KW gastrointestinal ulcers; pain; stroke; inflammation; hypertension;  
 KW heart failure; cognition; memory enhancement; spasticity; depression;  
 KW diabetes; cancers; asthma; bladder dysfunction; psychosis; arthritis.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 1  
 FT /label= Mephe  
 FT Modified-site 5  
 FT /note= "Amidated C-terminal"  
 XX  
 PN WO9409031-A1.  
 XX  
 PD 28-APR-1994.  
 XX  
 PF 14-OCT-1993; 93WO-US009809.  
 XX  
 PR 19-OCT-1992; 92US-00963169.  
 PR 08-OCT-1993; 93US-00131693.  
 XX

PA (WARN ) WARNER LAMBERT CO.  
 XX  
 PI Horwell DC, Howson W, Hugues J, Richardson RS;  
 XX  
 DR WPI; 1994-151243/18.  
 XX  
 PT New cholecystokinin analogues - useful e.g. in treatment of pain,  
 PT obesity, stroke, anxiety, and gastrointestinal ulcers.  
 XX  
 PS Claim 3; Page 66; 73pp; English.  
 XX  
 CC The sequences given in AAR53117-38 and AAR54530-51 are peptide analogues  
 CC of cholecystokinin (CCK) which can be used to treat obesity, anxiety,  
 CC gastrointestinal ulcers, pain, stroke, inflammation, hypertension, heart  
 CC failure, cognition, memory enhancement, spasticity, depression, diabetes,  
 CC cancers, asthma, bladder dysfunction, psychosis, arthritis and in the  
 CC treatment of substance withdrawal. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX  
 SQ Sequence 5 AA;  
 XX  
 CC Query Match 80.0%; Score 20; DB 2; Length 5;  
 CC Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 CC Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 FVGLM 5  
 Db 1 FFGLM 5  
 XX  
 RESULT 12  
 AAW41687  
 ID AAW41687 standard; peptide; 5 AA.  
 XX  
 AC AAW41687;  
 XX  
 DT 09-JUN-1998 (first entry)  
 DE Tetrapeptide #4.  
 XX  
 KW Ophthalmic drug; corneal disorder; ulcer; epithelial peeling; dry eye;  
 KW keratitis; insulin like growth factor-I; IGF-I; eye drop.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Modified-site 5  
 FT /note= "C-terminal amide"  
 XX  
 PN WO9749419-A1.  
 XX  
 PD 31-DEC-1997.  
 XX  
 PF 11-JUN-1997; 97WO-JP002015.  
 XX  
 PR 26-JUN-1996; 96JP-00165612.  
 XX  
 PA (SANT ) SANTEN PHARM CO LTD.  
 XX  
 PI Nishida T, Nakamura M, Nakata K;  
 XX  
 DR WPI; 1998-076907/07.  
 XX  
 PT Ophthalmic drug composition containing tetra:peptide - is useful as  
 PT corneal disorder remedy for corneal ulcer, corneal epithelial peeling,  
 PT dry eye, keratitis.  
 XX  
 PS Disclosure; Page 11; 19pp; Japanese.  
 XX  
 CC This sequence is shown in the specification. The invention relates to an  
 CC ophthalmic drug composition which contains Phe-Gly-Leu-Met-NH<sub>2</sub> or its  
 CC medicinally acceptable salts as the active ingredient. It is used,  
 CC together with insulin like growth factor-I (IGF-I), to treat corneal

CC disorders such as corneal ulcer, corneal epithelial peeling, dry eye and  
 CC keratitis. The dosage is 0.1-5000 (preferably 1-1000) mg/day of the  
 CC active ingredient and 0.001-100 (preferably 0.01-10) mg/day of IGF-I. The  
 CC preferable form of the composition is eye drops  
 XX

SQ Sequence 5 AA;

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
 |  
 |  
 |  
 |  
 Db 1 FFGLM 5

## RESULT 13

AAW99643  
 ID AAW99643 standard; peptide; 5 AA.

XX AAW99643;

AC AAW99643;

XX 21-MAY-1999 (first entry)

XX Substance P analogue peptide.

XX Substance P; myoblast transfer therapy; pain relief; analgesic;  
 KW behavioural abnormality; perceptible abnormality; opioid receptor;  
 KW psychiatric condition; depression; chronic anxiety syndrome; paranoia;  
 KW alcoholism; drug addiction; chronic pain; neuron.

XX Homo sapiens.

OS Synthetic.

XX EP898967-A1.

XX 03-MAR-1999.

XX 07-APR-1998; 98EP-00201068.

XX 11-AUG-1997; 97US-0055199P.

XX (CELL-) CELL THERAPY RES FOUND.

XX Law PK;

XX WPI; 1999-144555/13.

XX New composition for supplying peptide to opioid receptor - comprises  
 PT myogenic cells containing heterologous DNA encoding peptide and carrier.  
 XX Claim 8; Page 8; 11pp; English.

XX A composition has been developed for supplying a peptide to an opioid  
 CC receptor or that interferes with binding of substance P to its receptor.  
 CC The composition comprises: (a) myogenic cells that contain heterologous  
 CC DNA encoding the peptide to express the peptide; and (b) a  
 CC pharmaceutically acceptable carrier. The composition is useful for  
 CC relieving pain and for treating behavioural and perceptible abnormalities  
 CC using myoblast transfer therapy. It is useful in a method for treating  
 CC psychiatric conditions that involve abnormal perception e.g. depression,  
 CC chronic anxiety syndromes, paranoia, alcoholism and drug addiction,  
 CC chronic pain and other diseases in which opioid neurons and substance P  
 CC sensitive neurons play a role. The composition provides a continuous,  
 CC long term supply of opioid peptides (long-term analgesia) which lasts for  
 CC up to at least 6 years. The present sequence represents a specifically  
 CC claimed substance P analogue

SQ Sequence 5 AA;

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
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 |  
 |  
 |  
 Db 1 FFGLM 5

## RESULT 14

AAW50325

ID AAW50325 standard; peptide; 5 AA.

XX AAW50325;

XX 12-JAN-2000 (first entry)

XX Neutrophil-activating pancreatic derived peptide 125.

XX Cell activation; pancreas; treatment; cardiovascular disease; trauma;  
 KW inflammatory disease; autoimmune diseases; arthritis; diabetes; stroke;  
 KW organ rejection; ischemia; Alzheimer's disease; myocardial infarction;  
 KW haemorrhagic shock; diabetic retinopathy; venous insufficiency; angina;  
 KW trauma; protease inhibitor; hypertension; sepsis.

XX Unidentified.

XX WO9946367-A2.

XX 16-SEP-1999.

XX 11-MAR-1999; 99WO-US005247.

XX 11-MAR-1998; 98US-00038894.

XX (CELL-) CELL ACTIVATION INC.

XX (REGC) UNIV CALIFORNIA.

XX (SCRI) SCRIPPS RES INST.

XX Stoughton RB, Schmid-Schonbein GW, Hugli TE, Kistler E;

XX WPI; 1999-580234/49.

XX Use of cell activating compositions in developing products for diagnosis  
 PT and treatment of e.g. cardiovascular, inflammatory, autoimmune or  
 PT Alzheimer's disease, trauma, arthritis, organ rejection, diabetes, stroke  
 PT or ischemia.

XX Example 9; Page 184; 184pp; English.

XX This invention describes a novel method for the use and preparation of  
 CC cell activating compositions which involves preparing a cell activating  
 CC composition comprising (a) homogenizing pancreatic tissue in buffer at  
 CC about neutral or higher pH to produce a homogenate; (b) removing  
 CC particulates from the homogenate; (c) optionally incubating the resulting  
 CC homogenate, with particulates removed, with a protease; and (d)  
 CC fractionating the homogenate and selecting fractions that exhibit cell  
 CC activation activity. The methods can be used for improving treatment  
 CC outcome or reducing risk of treatment of e.g. cardiovascular disease,  
 CC inflammatory disease, trauma, autoimmune diseases, arthritis, organ  
 CC rejection, diabetes and diabetic complications, stroke, ischemia,  
 CC Alzheimer's disease, myocardial infarction, haemorrhagic shock, diabetic  
 CC retinopathy, diabetes, venous insufficiency, unstable angina or trauma.  
 CC They can be used in the veterinary treatment of a non-human subject.  
 CC Protease inhibitors can be used to lower cell activation resulting from  
 CC these diseases and deficiencies. The detection of an elevated level of  
 CC hydrogen peroxide can be used to detect an inflammatory condition. An  
 CC elevated level of hydrogen peroxide in plasma or whole blood and in the  
 CC presence of superoxide dismutase (SOD) indicates leukocyte up regulation,  
 CC e.g. indicative of the onset of an acute cardiovascular disorders, such  
 CC as disease onset or ischemic complications. An elevated level of hydrogen  
 CC peroxide in plasma or whole blood and a low level in the presence of SOD  
 CC is indicative of a chronic or immune compromised condition e.g.  
 CC hypertension or sepsis. AAW50201-Y50334 represent peptides used in the  
 CC method of the invention

SQ Sequence 5 AA;

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 FVGLM 5  
 |  
 Db 1 PFGLM 5

RESULT 15

AAW92660  
 ID AAW92660 standard; peptide; 5 AA.

XX AC AAW92660;

XX 20-MAR-2003 (revised)  
 DT 30-APR-1999 (first entry)

XX Human tachykinin agonist beta-amyloid peptide fragment #6.

XX Tachykinin agonist; beta-amyloid; inhibition; neurotoxin; treatment;  
 KW Alzheimer's disease; Down's syndrome; amyloidosis; human;  
 KW hereditary cerebral haemorrhage; non-inherited congenital angiopathy.

XX OS Homo sapiens.

XX FN US5876948-A.

XX PD 02-MAR-1999.

XX PF 29-JUL-1991; 91US-00737371.

XX PR 27-JUL-1990; 90US-00559173.

XX PA (CHIL-) CHILDRENS MEDICAL CENT.

XX PI Yankner BA;

XX DR WPI; 1999-189630/16.

XX Screening for neurotoxin inhibitors - by testing compounds for their  
 effect on beta-amyloid peptide neurotoxic effect on neuronal cells.

XX PS Disclosure; Col 13-14; 28pp; English.

XX This invention describes a method for screening compounds for inhibiting  
 a neurotoxin. The method involves incubating tachykinin agonists with  
 neuronal cells and a beta-amyloid peptide neurotoxin. The methods can be  
 used for identifying compounds for treating diseases characterised by an  
 undesirable build up of beta-amyloid protein, e.g. Alzheimer's disease,  
 Down's syndrome, and the syndromes of hereditary cerebral haemorrhage,  
 with amyloidosis and non-inherited congenital angiopathy with cerebral  
 haemorrhage. AAW92655-W92731 are tachykinin agonists derived from human  
 beta-amyloid peptide fragments. (Updated on 20-MAR-2003 to correct PF  
 field.)

SQ Sequence 5 AA;

Query Match 80.0%; Score 20; DB 2; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 FVGLM 5  
 |  
 Db 1 PFGLM 5

Search completed: March 23, 2005, 14:46:01  
 Job time : 121.5 secs



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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:50:07 ; Search time 92 Seconds  
(without alignments)  
17.995 Million cell updates/sec

Title: SEQ2

Perfect score: 25

Sequence: 1 fvglm 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1407402 seqs, 331100923 residues

Total number of hits satisfying chosen parameters: 21937

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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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1	20	80.0	5	US-09-265-690C-1	Sequence 1, Appli
2	20	80.0	5	US-09-265-690C-4	Sequence 4, Appli
3	20	80.0	5	US-10-230-133-4	Sequence 4, Appli
4	20	80.0	5	US-10-053-669-1	Sequence 1, Appli
5	20	80.0	5	US-10-053-669-4	Sequence 4, Appli
6	20	80.0	5	US-10-134-187-3	Sequence 3, Appli
7	20	80.0	5	US-10-688-741-3	Sequence 3, Appli
8	20	80.0	5	US-10-695-536-4	Sequence 4, Appli
9	20	80.0	5	US-10-805-881-1	Sequence 1, Appli
10	20	80.0	5	US-10-805-881-4	Sequence 4, Appli
11	20	80.0	5	US-10-497-628-15	Sequence 15, Appli
12	17	68.0	5	US-10-168-789A-32	Sequence 32, Appli
13	17	68.0	5	US-10-497-628-16	Sequence 16, Appli

14	16	64.0	4	8	US-08-484-409-30	Sequence 30, Appli
15	16	64.0	4	13	US-10-033-026-2	Sequence 2, Appli
16	16	64.0	5	10	US-09-992-124A-14	Sequence 14, Appli
17	16	64.0	5	14	US-10-168-789A-39	Sequence 39, Appli
18	16	64.0	5	17	US-10-641-286-27	Sequence 27, Appli
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23	15	60.0	4	14	US-10-053-669-2	Sequence 2, Appli
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28	15	60.0	5	10	US-09-992-124A-5	Sequence 5, Appli
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30	15	60.0	5	16	US-10-128-520-360	Sequence 360, App
31	15	60.0	5	16	US-10-346-737A-30	Sequence 30, Appli
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34	14	56.0	4	9	US-09-943-123-24	Sequence 24, Appli
35	14	56.0	4	14	US-10-087-402-10	Sequence 10, Appli
36	14	56.0	4	14	US-10-361-290-12	Sequence 12, Appli
37	14	56.0	4	17	US-10-712-359A-24	Sequence 24, Appli
38	14	56.0	4	17	US-10-821-240A-244	Sequence 244, App
39	14	56.0	5	13	US-10-014-716-28	Sequence 28, Appli
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41	14	56.0	5	14	US-10-190-082-680	Sequence 680, App
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43	14	56.0	5	15	US-10-454-566-10	Sequence 10, Appli
44	14	56.0	5	15	US-10-436-549-565	Sequence 565, App
45	14	56.0	5	16	US-10-712-425-565	Sequence 565, App

#### ALIGNMENTS

RESULT 1  
US-09-265-690C-1  
; Sequence 1, Application US/09265690C  
; Publication No. US20010051345A1  
; GENERAL INFORMATION:  
; APPLICANT: Wellb, Ibert  
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac  
; FILE OF INVENTION: For Disease Diagnosis  
; FILE REFERENCE: 1427001  
; CURRENT APPLICATION NUMBER: US/09/265,690C  
; CURRENT FILING DATE: 1999-03-10  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1  
; LENGTH: 5  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD\_RES  
; LOCATION: (5)..(5)  
; OTHER INFORMATION: AMIDATION  
US-09-265-690C-1

Query Match 80.0%; Score 20; DB 9; Length 5;  
Best Local Similarity 80.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5

Db 1 FVGLM 5

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US-09-265-690C-4

; Sequence 4, Application US/09265690C

; Publication No. US20010051345A1

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; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Ma
; FILE REFERENCE: 1427001
; CURRENT APPLICATION NUMBER: US/09/265,690C
; CURRENT FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: MOD_RES
; LOCATION: (5)..(5)
; OTHER INFORMATION: AMIDATION
; NAME/KEY: VARIANT
; LOCATION: (2)..(2)
; OTHER INFORMATION: "X" may be either Phe or Val.
US-09-265-690C-4

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Query Match      80.0%; Score 20; DB 9; Length 5;
Best Local Similarity 80.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      1 FVGLM 5
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Db      1 FXGLM 5

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; Publication No. US20030040625A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and
; FILE REFERENCE: 2892-106
; CURRENT APPLICATION NUMBER: US/10/230,133
; CURRENT FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: 09/635,266
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: MOD_RES
; LOCATION: (5)..(5)
; OTHER INFORMATION: AMIDATION
; NAME/KEY: VARIANT
; LOCATION: (2)..(2)
; OTHER INFORMATION: "X" may be either F or V.
US-10-230-133-4

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Query Match      80.0%; Score 20; DB 14; Length 5;
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QY      1 FVGLM 5
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Db      1 FXGLM 5

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RESULT 4
US-10-053-669-1
; Sequence 1, Application US/10053669
; Publication No. US20030077658A1

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; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac
; FILE REFERENCE: N1427-005
; CURRENT APPLICATION NUMBER: US/10/053,669
; CURRENT FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: 09/265,690
; PRIOR FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 4
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; SEQ ID NO 1
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; TYPE: PRT
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; NAME/KEY: MOD_RES
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Query Match      80.0%; Score 20; DB 14; Length 5;
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Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      1 FVGLM 5
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Db      1 FXGLM 5

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RESULT 5
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; Publication No. US20030077658A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac
; FILE REFERENCE: N1427-005
; CURRENT APPLICATION NUMBER: US/10/053,669
; CURRENT FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: 09/265,690
; PRIOR FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
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; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: MOD_RES
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; OTHER INFORMATION: AMIDATION
; NAME/KEY: VARIANT
; LOCATION: (2)..(2)
; OTHER INFORMATION: "X" may be either Phe or Val.
US-10-053-669-4

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Query Match      80.0%; Score 20; DB 14; Length 5;
Best Local Similarity 80.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      1 FVGLM 5
        | |||
Db      1 FXGLM 5

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RESULT 6
US-10-134-187-3
; Sequence 3, Application US/10134187
; Publication No. US20030202981A1
; GENERAL INFORMATION:
; APPLICANT: Kream, Richard M.

```

; APPLICANT: Kream, Richard M.  
 ; APPLICANT: Kream, Richard M.  
 ; TITLE OF INVENTION: Chimeric Hybrid Analgesics  
 ; FILE REFERENCE: Kream  
 ; CURRENT APPLICATION NUMBER: US/10/134,187  
 ; CURRENT FILING DATE: 2002-04-26  
 ; NUMBER OF SEQ ID NOS: 3  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 3  
 ; LENGTH: 5  
 ; TYPE: PRT  
 ; ORGANISM: mammalian  
 US-10-134-187-3

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Qy 1 FVGLM 5  
 Db 1 PFGLM 5

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US-10-688-741-3  
 ; Sequence 3, Application US/10688741  
 ; Publication No. US20040106636A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Kream, Richard M.  
 ; APPLICANT: Kream, Richard M.  
 ; APPLICANT: Kream, Richard M.  
 ; TITLE OF INVENTION: Method Of Inhibiting Opioid Tolerance Development With Chimeric H  
 ; FILE REFERENCE: Analgesics  
 ; CURRENT APPLICATION NUMBER: US/10/688,741  
 ; CURRENT FILING DATE: 2003-10-17  
 ; NUMBER OF SEQ ID NOS: 3  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 3  
 ; LENGTH: 5  
 ; TYPE: PRT  
 ; ORGANISM: mammalian  
 US-10-688-741-3

Query Match 80.0%; Score 20; DB 16; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.3e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
 Db 1 PFGLM 5

## RESULT 8

US-10-695-536-4  
 ; Sequence 4, Application US/10695536  
 ; Publication No. US20040110692A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Wells, Ibert Clifton  
 ; TITLE OF INVENTION: Antagonists of the Magnesium Binding Defect as Therapeutic Agents  
 ; FILE REFERENCE: 800812-0008  
 ; CURRENT APPLICATION NUMBER: US/10/695,536  
 ; CURRENT FILING DATE: 2003-10-28  
 ; PRIOR APPLICATION NUMBER: US 10/230,133  
 ; PRIOR FILING DATE: 2002-08-29  
 ; PRIOR APPLICATION NUMBER: US 09/635,266  
 ; PRIOR FILING DATE: 2000-08-09  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: PatentIn version 3.2  
 ; SEQ ID NO 4  
 ; LENGTH: 5  
 ; TYPE: PRT

; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: MISC\_FEATURE  
 ; LOCATION: (2)..(2)  
 ; OTHER INFORMATION: X can be either F or V  
 ; FEATURE:  
 ; NAME/KEY: MOD\_RES  
 ; LOCATION: (5)..(5)  
 ; OTHER INFORMATION: AMIDATION  
 US-10-695-536-4

Query Match 80.0%; Score 20; DB 16; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.3e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
 Db 1 FXGLM 5

## RESULT 9

US-10-805-881-1  
 ; Sequence 1, Application US/10805881  
 ; Publication No. US20040171093A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Wells, Ibert C.  
 ; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound  
 ; FILE REFERENCE: 800812-0005  
 ; CURRENT APPLICATION NUMBER: US/10/805,881  
 ; CURRENT FILING DATE: 2004-03-22  
 ; PRIOR APPLICATION NUMBER: US 10/053,669  
 ; PRIOR FILING DATE: 2002-01-24  
 ; PRIOR APPLICATION NUMBER: US 10/695,536  
 ; PRIOR FILING DATE: 2003-10-28  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: PatentIn version 3.2  
 ; SEQ ID NO 1  
 ; LENGTH: 5  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: MOD\_RES  
 ; LOCATION: (5)..(5)  
 ; OTHER INFORMATION: AMIDATION  
 US-10-805-881-1

Query Match 80.0%; Score 20; DB 16; Length 5;  
 Best Local Similarity 80.0%; Pred. No. 1.3e+06;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
 Db 1 PFGLM 5

## RESULT 10

US-10-805-881-4  
 ; Sequence 4, Application US/10805881  
 ; Publication No. US20040171093A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Wells, Ibert C.  
 ; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound  
 ; FILE REFERENCE: 800812-0005  
 ; CURRENT APPLICATION NUMBER: US/10/805,881  
 ; CURRENT FILING DATE: 2004-03-22  
 ; PRIOR APPLICATION NUMBER: US 10/053,669  
 ; PRIOR FILING DATE: 2002-01-24  
 ; PRIOR APPLICATION NUMBER: US 10/695,536  
 ; PRIOR FILING DATE: 2003-10-28  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: PatentIn version 3.2

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; SEQ ID NO 4
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (2)-(2)
; OTHER INFORMATION: "X" may be either P or V
; FEATURE:
; NAME/KEY: MOD RES
; LOCATION: (5)..(5)
; OTHER INFORMATION: AMIDATION
US-10-805-881-4
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Query Match      80.0%; Score 20; DB 16; Length 5;
Best Local Similarity 80.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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QY 1 FVGLM 5
   ||||
Db 1 FXGLM 5
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## RESULT 11

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US-10-497-628-15
; Sequence 15, Application US/10497628
; Publication No. US20050009752A1
; GENERAL INFORMATION:
; APPLICANT: Teruo Nishida
; APPLICANT: Makoto Inui
; APPLICANT: Masatsugu Nakamura
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME
; FILE REFERENCE: 04355/HG
; CURRENT APPLICATION NUMBER: US/10/497,628
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: JP 2001-368103
; PRIOR FILING DATE: 2001-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Human
US-10-497-628-15
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```
Query Match      80.0%; Score 20; DB 17; Length 5;
Best Local Similarity 80.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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```
QY 1 FVGLM 5
   ||||
Db 1 FFGLM 5
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## RESULT 12

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US-10-168-789A-32
; Sequence 32, Application US/10168789A
; Publication No. US20030148943A1
; GENERAL INFORMATION:
; APPLICANT: ITOH, Yasunori
; APPLICANT: NISHI, Kazunori
; APPLICANT: KITADA, Chieko
; APPLICANT: INATOMI, No. US20030148943A1
; TITLE OF INVENTION: No. US20030148943A1el Tachykinin-like Polypeptides and Use Thereof
; FILE REFERENCE: 2680USOP
; CURRENT APPLICATION NUMBER: US/10/168,789A
; CURRENT FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/JP00/09083
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: JP 11-362638
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: JP 12-066714
; PRIOR FILING DATE: 1999-03-10
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; NUMBER OF SEQ ID NOS: 64
; SEQ ID NO 32
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial Polypeptide
; NAME/KEY: PEPTIDE
; LOCATION: (02)..(02)
; OTHER INFORMATION: Xaa is any amino acid
US-10-168-789A-32
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Query Match      68.0%; Score 17; DB 14; Length 5;
Best Local Similarity 60.0%; Pred. No. 1.3e+06;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
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QY 1 FVGLM 5
   ||||
Db 1 FXGLL 5
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## RESULT 13

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US-10-497-628-16
; Sequence 16, Application US/10497628
; Publication No. US20050009752A1
; GENERAL INFORMATION:
; APPLICANT: Teruo Nishida
; APPLICANT: Makoto Inui
; APPLICANT: Masatsugu Nakamura
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME
; FILE REFERENCE: 04355/HG
; CURRENT APPLICATION NUMBER: US/10/497,628
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: JP 2001-368103
; PRIOR FILING DATE: 2001-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Human
US-10-497-628-16
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Query Match      68.0%; Score 17; DB 17; Length 5;
Best Local Similarity 60.0%; Pred. No. 1.3e+06;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
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```
QY 1 FVGLM 5
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Db 1 YFGLM 5
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## RESULT 14

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US-08-484-409-30
; Sequence 30, Application US/08484409
; Publication No. US20020076412A1
; GENERAL INFORMATION:
; APPLICANT: Steinman, Lawrence
; APPLICANT: Zamvil, Scott
; TITLE OF INVENTION: METHODS FOR MODULATING THE IMMUNE SYSTEM
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
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; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484,409
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 690068.409C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
US-08-484-409-30

Query Match      64.0%; Score 16; DB 8; Length 4;
Best Local Similarity 100.0%; Pred.No. 1.3e+06;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 FVG 3
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Db      2 FVG 4

RESULT 15
US-10-033-026-2
; Sequence 2, Application US/10033026
; Publication No. US20020147309A1
; GENERAL INFORMATION:
; APPLICANT: Lipscombe, Diane
; TITLE OF INVENTION: HUMAN N-TYPE CALCIUM CHANNEL ISOFORM AND USES THEREOF
; FILE REFERENCE: B1055/7000
; CURRENT APPLICATION NUMBER: US/10/033,026
; CURRENT FILING DATE: 2001-12-28
; PRIOR APPLICATION NUMBER: US 09/268,163
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: US 60/077,901
; PRIOR FILING DATE: 1998-03-13
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-033-026-2

Query Match      64.0%; Score 16; DB 13; Length 4;
Best Local Similarity 100.0%; Pred.No. 1.3e+06;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 FVG 3
        |||
Db      2 FVG 4

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Search completed: March 23, 2005, 15:07:06  
 Job time : 93 secs



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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:37:21 ; Search time 30 Seconds  
(without alignments)  
12.442 Million cell updates/sec

Title: SEQ2

Perfect score: 25

Sequence: 1 fvglm 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 27945

Minimum DB seq length: 0

Maximum DB seq length: 5

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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5: /cgn2\_6/prodata/1/aaa/PCITUS.COMB.pep:\*  
6: /cgn2\_6/prodata/1/aaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	20	80.0	5	1 US-07-753-909B-3	Sequence 3, Appli
2	20	80.0	5	1 US-07-934-553-2	Sequence 2, Appli
3	20	80.0	5	1 US-08-269-288-1	Sequence 1, Appli
4	20	80.0	5	1 US-08-225-474-2	Sequence 2, Appli
5	20	80.0	5	1 US-08-391-910-1	Sequence 1, Appli
6	20	80.0	5	1 US-08-418-994-1	Sequence 1, Appli
7	20	80.0	5	1 US-08-391-814-1	Sequence 1, Appli
8	20	80.0	5	1 US-08-441-591-61	Sequence 61, Appl
9	20	80.0	5	1 US-08-303-362A-61	Sequence 61, Appl
10	20	80.0	5	1 US-08-462-415-1	Sequence 1, Appli
11	20	80.0	5	1 US-08-463-874-1	Sequence 1, Appli
12	20	80.0	5	1 US-08-444-135-1	Sequence 1, Appli
13	20	80.0	5	1 US-08-318-391-1	Sequence 1, Appli
14	20	80.0	5	2 US-07-737-371E-6	Sequence 6, Appli
15	20	80.0	5	3 US-08-257-966-1	Sequence 1, Appli
16	20	80.0	5	3 US-09-265-690C-1	Sequence 1, Appli
17	20	80.0	5	3 US-09-265-690C-4	Sequence 4, Appli
18	20	80.0	5	4 US-08-153-847-1	Sequence 1, Appli
19	20	80.0	5	4 US-09-635-266-4	Sequence 4, Appli
20	20	80.0	5	4 US-10-230-133-4	Sequence 4, Appli
21	20	80.0	5	5 PCT-US95-05600-78	Sequence 78, Appl
22	19	76.0	5	1 US-07-690-284A-6	Sequence 6, Appli
23	17	68.0	5	2 US-07-737-371E-48	Sequence 48, Appl
24	16	64.0	4	1 US-08-127-904-2	Sequence 2, Appli
25	16	64.0	4	1 US-08-127-904-12	Sequence 12, Appl
26	16	64.0	4	3 US-08-638-407-24	Sequence 24, Appl
27	16	64.0	4	3 US-09-264-709A-11	Sequence 11, Appl

28	16	64.0	4	3 US-09-264-709A-33	Sequence 33, Appl
29	16	64.0	4	3 US-09-264-709A-35	Sequence 35, Appl
30	16	64.0	4	3 US-09-268-163-2	Sequence 2, Appli
31	16	64.0	4	5 PCT-US94-10475-2	Sequence 2, Appli
32	16	64.0	4	5 PCT-US94-10475-12	Sequence 12, Appli
33	16	64.0	5	1 US-07-690-284A-2	Sequence 2, Appli
34	16	64.0	5	1 US-08-127-904-1	Sequence 1, Appli
35	16	64.0	5	3 US-09-264-709A-27	Sequence 27, Appl
36	16	64.0	5	4 US-09-608-892-16	Sequence 16, Appl
37	16	64.0	5	5 PCT-US94-10475-1	Sequence 1, Appli
38	15	60.0	3	4 US-09-635-266-2	Sequence 2, Appli
39	15	60.0	3	4 US-10-230-133-2	Sequence 2, Appli
40	15	60.0	4	1 US-08-127-904-8	Sequence 8, Appli
41	15	60.0	4	1 US-08-441-591-63	Sequence 63, Appl
42	15	60.0	4	1 US-08-303-362A-63	Sequence 63, Appl
43	15	60.0	4	2 US-08-070-301-8	Sequence 8, Appli
44	15	60.0	4	3 US-09-265-690C-2	Sequence 2, Appli
45	15	60.0	4	4 US-09-635-266-3	Sequence 3, Appli

## ALIGNMENTS

RESULT 1  
US-07-753-909B-3  
; Sequence 3, Application US/07753909B  
; Patent No. 5304632  
; GENERAL INFORMATION:  
; APPLICANT: Vaudry, Hubert  
; APPLICANT: Conlon, Michael J.  
; TITLE OF INVENTION: Neuropeptides of the Tachykinin Family  
; NUMBER OF SEQUENCES: 3  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Zarley, McKee, Thomte, Voorhees, and Sease  
; STREET: 801 Grand, Suite 3200  
; CITY: Des Moines  
; STATE: Iowa  
; COUNTRY: United States  
; ZIP: 50309  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07753,909B  
; FILING DATE: 19910903  
; CLASSIFICATION: 530  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: FR 9106759  
; FILING DATE: 04-JUN-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Sease, Edmund J.  
; REGISTRATION NUMBER: 24,741  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (515)-288-3667  
; TELEFAX: (515)-288-1338  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 5 amino acids  
; TYPE: AMINO ACID  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FRAGMENT TYPE: C-terminal  
; ORIGINAL SOURCE:  
; ORGANISM: Rana ridibunda  
; DEVELOPMENTAL STAGE: adult  
; TISSUE TYPE: brain  
US-07-753-909B-3  
Query Match 80.0%; Score 20; DB 1; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;

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Matches      4;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      1  FVGLM 5
Db       1  FXGLM 5

RESULT 2
US-07-934-553-2
; Sequence 2, Application US/07934553
; Patent No. 5314690
; GENERAL INFORMATION:
; APPLICANT: PATTERSON, ROY
; TITLE OF INVENTION: METHOD AND COMPOSITION FOR REDUCING Ige
; TITLE OF INVENTION: ANTIBODIES TO SPECIFIC ALLERGENS
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TILTON, FALLON, LUNGUMUS & CHESTNUT
; STREET: 100 SOUTH WACKER DRIVE
; CITY: CHICAGO
; STATE: ILLINOIS
; COUNTRY: USA
; ZIP: 60606-4002
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/934,553
; FILING DATE: 19920821
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/705,071
; FILING DATE: 24-MAY-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: FENTRESS, SUSAN B
; REGISTRATION NUMBER: 31,327
; REFERENCE/DOCKET NUMBER: NU-9033CIP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/456-8000
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: AMINO ACID
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-07-934-553-2

Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches      4;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      1  FVGLM 5
Db       1  FFGLM 5

RESULT 3
US-08-269-288-1
; Sequence 1, Application US/08269288
; Patent No. 5491140
; GENERAL INFORMATION:
; APPLICANT: Brune, Robert F.
; APPLICANT: Gehlert, Donald R.
; APPLICANT: Howbert, James J.
; APPLICANT: Lunn, William H.W.
; TITLE OF INVENTION: NAPHTHYL TACHYKININ RECEPTOR ANTAGONISTS
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Eli Lilly and Company
; STREET: Lilly Corporate Center/1104
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: United States of America
; ZIP: 46285
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/269,288
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Gaylo, Paul J.
; REGISTRATION NUMBER: 36,808
; REFERENCE/DOCKET NUMBER: X-9715
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 276-0756
; TELEFAX: (317) 276-3861
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-269-288-1

Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches      4;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      1  FVGLM 5
Db       1  FXGLM 5

RESULT 4
US-08-225-474-2
; Sequence 2, Application US/08225474
; Patent No. 5560915
; GENERAL INFORMATION:
; APPLICANT: Patterson, ROY
; APPLICANT: Harris, Kathleen E.
; TITLE OF INVENTION: Method and Composition for Treating
; TITLE OF INVENTION: Ige Mediated Allergies
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Tilton, Fallon, Lungmus & Chestnut
; STREET: 100 S. Wacker Drive, Suite 960
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606-4002
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/225,474
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/934,553
; FILING DATE: 21-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/705,071
; FILING DATE: 24-MAY-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Tilton, Timothy L.

```



REGISTRATION NUMBER: 16,926  
REFERENCE/DOCKET NUMBER: NU 9033-CIP2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312)-456-8000  
TELEFAX: (312)-456-7776  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: peptide  
US-08-225-474-2

Query Match 80.0%; Score 20; DB 1; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
| | | |  
Db 1 FVGLM 5

RESULT 5  
US-08-391-910-1  
; Sequence 1, Application US/08391910  
; Patent No. 5563133  
; GENERAL INFORMATION:  
; APPLICANT: Hipskind, Philip A.  
; TITLE OF INVENTION: HEXAMETHYLENIMINYL TACHYKININ RECEPTOR  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Eli Lilly and Company  
; STREET: Lilly Corporate Center  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: United States of America  
; ZIP: 46285  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/391,910  
; FILING DATE:  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Gaylo, Paul J.  
; REGISTRATION NUMBER: 36,808  
; REFERENCE/DOCKET NUMBER: X-9979  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (317) 276-0756  
; TELEFAX: (317) 276-3861  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 5 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-391-910-1

Query Match 80.0%; Score 20; DB 1; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
| | | |  
Db 1 FVGLM 5

RESULT 6  
US-08-418-994-1  
; Sequence 1, Application US/08418994  
; Patent No. 5565568  
; GENERAL INFORMATION:  
; APPLICANT: Cho, Sung-Yong S.  
; APPLICANT: Hipskind, Philip A.  
; APPLICANT: Howbert, J. J.  
; APPLICANT: Nixon, Brian S.  
; APPLICANT: Muehl, Brian A.  
; TITLE OF INVENTION: 2-ACYLAMINOPROPANAMIDES AS TACHYKININ  
; TITLE OF INVENTION: RECEPTOR ANTAGONISTS  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Eli Lilly and Company  
; STREET: Lilly Corporate Center  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: United States of America  
; ZIP: 46285  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/418,994  
; FILING DATE:  
; CLASSIFICATION: 530  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Gaylo, Paul J.  
; REGISTRATION NUMBER: 36,808  
; REFERENCE/DOCKET NUMBER: X-8252  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (317) 276-0756  
; TELEFAX: (317) 276-3861  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 5 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-418-994-1

Query Match 80.0%; Score 20; DB 1; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5  
| | | |  
Db 1 FVGLM 5

RESULT 7  
US-08-391-814-1  
; Sequence 1, Application US/08391814  
; Patent No. 5607947  
; GENERAL INFORMATION:  
; APPLICANT: Hipskind, Philip A.  
; TITLE OF INVENTION: PYRROLIDINYL TACHYKININ RECEPTOR  
; TITLE OF INVENTION: ANTAGONISTS  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Eli Lilly and Company  
; STREET: Lilly Corporate Center  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: United States of America  
; ZIP: 46285  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
US-08-391-814-1

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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/391,814
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Gaylo, Paul J.
; REGISTRATION NUMBER: 36,808
; REFERENCE/DOCKET NUMBER: X-9965
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 276-0756
; TELEFAX: (317) 276-3861
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-391-814-1

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```

Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 FVGLM 5
Db 1 FXGLM 5

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RESULT 8
US-08-441-591-61
; Sequence 61, Application US/08441591
; Patent No. 5637682
; GENERAL INFORMATION:
; APPLICANT: NIEUWLANDT, D., GOLD, L. AND WECKER, M.
; TITLE OF INVENTION: HIGH-AFFINITY
; TITLE OF INVENTION: OLIGONUCLEOTIDE LIGANDS
; TITLE OF INVENTION: TO THE TACHYKININ
; TITLE OF INVENTION: SUBSTANCE P
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Swanson & Bratschun, L.L.C.
; STREET: 8400 E. Prentice Avenue, Suite 200
; CITY: Englewood
; STATE: Colorado
; COUNTRY: USA
; ZIP: 80111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MG storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/441,591
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/303,362
; FILING DATE: 9-SEPTEMBER-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/714,131
; FILING DATE: 10-JUNE-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/931,473
; FILING DATE: 17-AUGUST-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/117,991
; FILING DATE: 8-SEPTEMBER 1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/964,624
; FILING DATE: 21-OCTOBER-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Barry J. Swanson
; REGISTRATION NUMBER: 33,215
; REFERENCE/DOCKET NUMBER: NEX21/C
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 793-3333
; TELEFAX: (303) 793-3433
; INFORMATION FOR SEQ ID NO: 61:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; FEATURE:
; NAME/KEY: Xaa
; LOCATION: 2
; OTHER INFORMATION: AROMATIC OR ALIPHATIC
; OTHER INFORMATION: AMINO ACID
US-08-441-591-61

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Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 FVGLM 5
Db 1 FXGLM 5

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RESULT 9
US-08-303-362A-61
; Sequence 61, Application US/08303362A
; Patent No. 5648214
; GENERAL INFORMATION:
; APPLICANT: NIEUWLANDT, D., GOLD, L. AND WECKER, M.
; TITLE OF INVENTION: HIGH-AFFINITY
; TITLE OF INVENTION: OLIGONUCLEOTIDE LIGANDS
; TITLE OF INVENTION: TO THE TACHYKININ
; TITLE OF INVENTION: SUBSTANCE P
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Swanson & Bratschun, L.L.C.
; STREET: 8400 E. Prentice Avenue, Suite 200
; CITY: Englewood
; STATE: Colorado
; COUNTRY: USA
; ZIP: 80111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MG storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WordPerfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/303,362A
; FILING DATE: 9-SEPTEMBER-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/714,131
; FILING DATE: 10-JUNE-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/931,473
; FILING DATE: 17-AUGUST-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/117,991
; FILING DATE: 8-SEPTEMBER 1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/536,428
; FILING DATE: 11-JUNE-1990
; APPLICATION NUMBER: 07/964,624

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;
; FILING DATE: 21-OCTOBER-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Barry J. Swanson
; REGISTRATION NUMBER: 33,215
; REFERENCE/DOCKET NUMBER: NEX21
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 793-3333
; TELEFAX: (303) 793-3433
; INFORMATION FOR SEQ ID NO: 61:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; FEATURE:
; NAME/KEY: Xaa
; LOCATION: 2
; OTHER INFORMATION: AROMATIC OR ALIPHATIC
; OTHER INFORMATION: AMINO ACID
US-08-303-362A-61

Query Match 80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5

RESULT 10
US-08-462-415-1
; Sequence 1, Application US/08462415
; Patent No. 5670499
; GENERAL INFORMATION:
; APPLICANT: Cho, Sung Y.
; APPLICANT: Crowell, Thomas A.
; APPLICANT: Gitter, Bruce D.
; APPLICANT: Hipskind, Philip A.
; APPLICANT: Howbert, Jeffrey J.
; APPLICANT: Krushinski, Joseph H.
; APPLICANT: Lobb, Karen L.
; APPLICANT: Muehl, Brian S.
; APPLICANT: Nixon, James A.
; TITLE OF INVENTION: HETEROCYCLIC TACHYKININ RECEPTOR
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Eli Lilly and Company
; STREET: Lilly Corporate Center/Patent Division
; CITY: Indianapolis
; STATE: IN
; COUNTRY: US
; ZIP: 46285
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/462,415
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Gaylo, Paul J.
; REGISTRATION NUMBER: 36,808
; REFERENCE/DOCKET NUMBER: X8849B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 317-276-0756
; TELEFAX: 317-276-3861
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-462-415-1

Query Match 80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5

RESULT 11
US-08-463-874-1
; Sequence 1, Application US/08463874
; Patent No. 5684033
; GENERAL INFORMATION:
; APPLICANT: Cho, Sung Y.
; APPLICANT: Crowell, Thomas A.
; APPLICANT: Gitter, Bruce D.
; APPLICANT: Hipskind, Philip A.
; APPLICANT: Howbert, Jeffrey J.
; APPLICANT: Krushinski, Joseph H.
; APPLICANT: Lobb, Karen L.
; APPLICANT: Muehl, Brian S.
; APPLICANT: Nixon, James A.
; TITLE OF INVENTION: NON-PEPTIDE TACHYKININ RECEPTOR
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Eli Lilly and Company
; STREET: Lilly Corporate Center/Patent Division
; CITY: Indianapolis
; STATE: IN
; COUNTRY: US
; ZIP: 46285
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/463,874
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Gaylo, Paul J.
; REGISTRATION NUMBER: 36,808
; REFERENCE/DOCKET NUMBER: X8849C
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 317-276-0756
; TELEFAX: 317-276-3861
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-463-874-1

Query Match 80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5

;
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-462-415-1

Query Match 80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5
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RESULT 12
US-08-444-135-1
; Sequence 1, Application US/08444135
; Patent No. 5723575
; GENERAL INFORMATION:
; APPLICANT: Gilson, Chaim
; APPLICANT: Zelinger, Zvi
; APPLICANT: Byk, Gerardo
; TITLE OF INVENTION: Backbone Cyclic Peptides, Processes For
; TITLE OF INVENTION: Their Preparation and Pharmaceutical Compositions
; TITLE OF INVENTION: Containing Them
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/444,135
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/955,380
; FILING DATE: 01-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Jarkovsky, Isaac
; REGISTRATION NUMBER: 22,713
; REFERENCE/DOCKET NUMBER: 7754-003-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212 790-9090
; TELEFAX: 212 869-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 2
; OTHER INFORMATION: /label=Xaa
; OTHER INFORMATION: /notes="Xaa = Phe or Val"
US-08-444-135-1

Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5

RESULT 13
US-08-318-391-1
; Sequence 1, Application US/08318391
; Patent No. 5744482
; GENERAL INFORMATION:
; APPLICANT: Cohen, Marlene L.
; APPLICANT: Johnson, Kirk W.
; APPLICANT: Phebus, Lee A.
; TITLE OF INVENTION: USE OF A SEROTONIN AGONIST IN
; TITLE OF INVENTION: COMBINATION WITH A TACHYKININ RECEPTOR ANTAGONIST IN THE
; TITLE OF INVENTION: TREATMENT OR PREVENTION OF MIGRAINE
;

Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5

RESULT 14
US-07-737-371E-6
; Sequence 6, Application US/07737371E
; Patent No. 5876948
; GENERAL INFORMATION:
; APPLICANT: Yankner, Bruce A.
; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY
; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)
; NUMBER OF SEQUENCES: 77
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/737,371E
; FILING DATE: 29-JUL-1991
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/559,172
; FILING DATE: 27-JUL-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Freeman, John W.
; REGISTRATION NUMBER: 29,066

```

```

; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Eli Lilly and Company
; STREET: Lilly Corporate Center
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: United States of America
; ZIP: 46285
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/318,391
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Gaylo, Paul J.
; REGISTRATION NUMBER: 36,808
; REFERENCE/DOCKET NUMBER: X-9664
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 276-0756
; TELEFAX: (317) 276-3861
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-318-391-1

Query Match      80.0%; Score 20; DB 1; Length 5;
Best Local Similarity 80.0%; Pred. No. 4.1e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FVGLM 5
Db 1 FXGLM 5

RESULT 14
US-07-737-371E-6
; Sequence 6, Application US/07737371E
; Patent No. 5876948
; GENERAL INFORMATION:
; APPLICANT: Yankner, Bruce A.
; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY
; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)
; NUMBER OF SEQUENCES: 77
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/737,371E
; FILING DATE: 29-JUL-1991
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/559,172
; FILING DATE: 27-JUL-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Freeman, John W.
; REGISTRATION NUMBER: 29,066

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Search completed: March 23, 2005, 14:50:59  
Job time : 31 secs

REFERENCE/DOCKET NUMBER: 00108/028002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-542-5070  
TELEFAX: 617-542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-07-737-371E-6

Query Match 80.0%; Score 20; DB 2; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
|  
|  
|  
|  
Db 1 FVGLM 5

## RESULT 15

US-08-257-966-1  
Sequence 1, Application US/08257966  
Patent No. 6175013  
GENERAL INFORMATION:  
APPLICANT: Hipskind, Philip A.  
APPLICANT: Howbert, James J.  
APPLICANT: Muehl, Brian S.  
TITLE OF INVENTION: IMIDAZOLINYL TACHYKININ RECEPTOR  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Eli Lilly and Company  
STREET: Lilly Corporate Center/1104  
CITY: Indianapolis  
STATE: Indiana  
COUNTRY: United States of America  
ZIP: 46285  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/257,966  
FILING DATE:  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Gaylo, Paul J.  
REGISTRATION NUMBER: 36,808  
REFERENCE/DOCKET NUMBER: X-9197  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 276-0756  
TELEFAX: (317) 276-3861  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-257-966-1

Query Match 80.0%; Score 20; DB 3; Length 5;  
Best Local Similarity 80.0%; Pred. No. 4.1e+05;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FVGLM 5  
|  
|  
|  
|  
Db 1 FXGLM 5



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: March 23, 2005, 15:03:13 ; Search time 38 Seconds  
(without alignments)  
10.128 Million cell updates/sec

Title: SEQ3

Perfect score: 21

Sequence: 1 fgln 4

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 86

Minimum DB seq length: 0

Maximum DB seq length: 4

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: pir1.\*

2: pir2.\*

3: pir3.\*

4: pir4.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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2	10	47.6	4	2 A53284	T-cell receptor be
3	8	38.1	4	2 PT0633	T-cell receptor be
4	7	33.3	3	3 B23751	spinal cord peptid
5	7	33.3	4	2 E44823	synaptosomal-assoc
6	7	33.3	4	2 B53284	T-cell receptor be
7	6	28.6	3	3 PT0636	T-cell receptor be
8	6	28.6	3	3 PT0571	T-cell receptor be
9	6	28.6	3	3 S68328	blood cell protein
10	6	28.6	3	3 GKHU	growth-modulating
11	6	28.6	3	3 A60898	bursin - chicken
12	6	28.6	3	3 A23751	spinal cord peptid
13	6	28.6	4	1 ECKAA	antho-RFamide neur
14	6	28.6	4	2 D41654	hypothetical prote
15	6	28.6	4	2 S33508	starvation-induced
16	6	28.6	4	2 T30569	hypothetical prote
17	6	28.6	4	2 I38888	COI intron 16 prot
18	6	28.6	4	2 A35844	antho-RF amide neu
19	6	28.6	4	2 A34626	RPCH-related neuro
20	6	28.6	4	2 S39390	myosin-light-chain
21	6	28.6	4	2 S43959	Ig mu chain V regi
22	6	28.6	4	2 S47552	ubiquitin - rat
23	6	28.6	4	2 S09478	globulin IV alpha
24	6	28.6	4	2 PL0140	carbon-monoxide de
25	6	28.6	4	2 JQ1273	neuropeptide Antho
26	6	28.6	4	2 A35779	neuropeptide Antho
27	6	28.6	4	2 A60418	FMRFamide - polych
28	6	28.6	4	2 A32480	achatin-I - giant
29	6	28.6	4	2 PT0271	Ig heavy chain CRD

30	6	28.6	4	2 PT0711	T-cell receptor be
31	6	28.6	4	2 PT0698	T-cell receptor be
32	6	28.6	4	2 PT0677	T-cell receptor be
33	6	28.6	4	2 PT0706	T-cell receptor be
34	6	28.6	4	2 PT0675	T-cell receptor be
35	6	28.6	4	2 PT0721	T-cell receptor be
36	6	28.6	4	2 PT0566	T-cell receptor be
37	6	28.6	4	2 A32039	tyrosine-melanocyt
38	6	28.6	4	2 ECKK	cardioexcitatory n
39	5	23.8	3	3 PQ0010	angiotensin-conver
40	5	23.8	3	3 S13894	histidinol dehydro
41	5	23.8	3	3 I50412	gene p20K protein
42	5	23.8	3	3 PT0578	T-cell receptor be
43	5	23.8	3	3 I78890	tyrosine protein k
44	5	23.8	3	3 TI3892	cytochrome-c oxida
45	5	23.8	4	2 S18401	thyroglobulin - do

#### ALIGNMENTS

##### RESULT 1

PT0240

Ig heavy chain CRD3 region (clone 2-100B) - human (fragment)

C:Species: Homo sapiens (man)

C>Date: 30-Sep-1993 #sequence\_revision 30-Sep-1993 #text\_change 16-Aug-1996

C:Accession: PT0240

R:Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.

J. Exp. Med. 173, 395-407, 1991

A>Title: Preferential utilization of specific immunoglobulin heavy chain diversity and j

A:Reference number: PT0222; MUID:91108337; PMID:1893102

A:Accession: PT0240

A:Molecule type: DNA

A:Residues: 1-4 <YAM>

A:Experimental source: B lymphocyte

C:Keywords: heterotetramer; immunoglobulin

Query Match 47.6%; Score 10; DB 2; Length 4;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GL 3

Db 3 GL 4

##### RESULT 2

A53284

T-cell receptor beta 2 chain D' region, Dbeta2 - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C>Date: 02-May-1994 #sequence\_revision 18-Nov-1994 #text\_change 05-Nov-1999

C:Accession: A53284

R:Harindranath, N.; Alexander, C.B.; Mage, R.G.

Mol. Immunol. 28, 881-888, 1991

A>Title: Evolutionarily conserved organization and sequences of germline diversity and j

A:Reference number: A53284; MUID:91342695; PMID:1678859

A:Accession: A53284

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-4 <HAR>

A:Cross-references: GB:S60737; NID:g233916; PIDN:AAB19517.1; PID:g233917

A>Note: sequence extracted from NCBI backbone (NCBIN:60737, NCBIP:60739)

C:Keywords: T-cell receptor

Query Match 47.6%; Score 10; DB 2; Length 4;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GL 3

Db 1 GL 2

```

RESULT 3
PT0633
T-cell receptor beta chain V-D-J region (120-2C) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 09-Jul-2004
C:Accession: PT0633
R:Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A:Reference number: PT0509; MUID:91277601; PMID:1711558
A:Accession: PT0633
A>Status: translation not shown
A:Molecule type: mRNA
A:Residues: 1-4 <FEE>
A:Cross-references: UNIPROT:Q8BIV7
A:Experimental source: newborn thymus, strain BALB/c
C:Keywords: T-cell receptor

Query Match      38.1%; Score 8; DB 2; Length 4;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 GL 3
      :|
Db      3 GI 4

RESULT 4
B23751
spinal cord peptide SCP-5 - pig
C:Species: Sus scrofa domestica (domestic pig)
C>Date: 15-Jun-2001 #sequence_revision 15-Jun-2001 #text_change 15-Mar-2004
C:Accession: B23751
R:Hsi, K.L.; Chen, R.L.; Chen, Z.G.; Zhang, H.L.; Lu, Y.A.; Guo, S.Y.; Wu, S.X.; Tsou, K.
Arch. Biochem. Biophys. 240, 178-183, 1985
A:Reference number: A23751; MUID:85250425; PMID:4015098
A:Accession: B23751
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-3 <HSI>

Query Match      33.3%; Score 7; DB 3; Length 3;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      3 LM 4
      :|
Db      1 MM 2

RESULT 5
E44823
synaptosomal-associated protein SNAP-25 peptide 1 - rabbit (fragment)
N:Alternate names: superprotein peptide 1
C:Species: Oryctolagus cuniculus (domestic rabbit)
C>Date: 31-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 15-Jun-1996
C:Accession: E44823
R:Loewy, A.; Liu, W.S.; Baitinger, C.; Willard, M.B.
J. Neurosci. 11, 3412-3421, 1991
A:Title: The major 35S-methionine-labeled rapidly transported protein (superprotein) is
A:Reference number: A44823; MUID:92044785; PMID:1941090
A:Accession: E44823
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-4 <LOE>
A:Experimental source: visual tissue
A>Note: sequence extracted from NCBI backbone (NCBIP:64247)
C:Keywords: membrane trafficking

Query Match      33.3%; Score 7; DB 2; Length 4;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

RESULT 6
B53284
T-cell receptor beta 2 chain D region, Dbeta2 - rabbit
C:Species: Oryctolagus cuniculus (domestic rabbit)
C>Date: 02-May-1994 #sequence_revision 18-Nov-1994 #text_change 05-Nov-1999
C:Accession: B53284
R:Harindranath, N.; Alexander, C.B.; Mage, R.G.
Mol. Immunol. 28, 881-888, 1991
A:Title: Evolutionarily conserved organization and sequences of germline diversity and
A:Reference number: A53284; MUID:91342695; PMID:1678859
A:Accession: B53284
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-4 <HAR>
A:Cross-references: GB:S60737; NID:g233916; PIDN:AA819518.1; PID:g233918
A>Note: sequence extracted from NCBI backbone (NCBIN:60737, NCBIP:60738)
C:Keywords: T-cell receptor

Query Match      33.3%; Score 7; DB 2; Length 4;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 1; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 FG 2
      :|
Db      2 WG 3

RESULT 7
PT0636
T-cell receptor beta chain V-D-J region (100-2AT) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 15-Jun-2001 #sequence_revision 15-Jun-2001 #text_change 15-Jun-2001
C:Accession: PT0636
R:Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A:Reference number: PT0509; MUID:91277601; PMID:1711558
A:Accession: PT0636
A>Status: translation not shown
A:Molecule type: mRNA
A:Residues: 1-3 <FEE>
A:Experimental source: newborn thymus, strain BALB/c
C:Keywords: T-cell receptor

Query Match      28.6%; Score 6; DB 3; Length 3;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 G 2
      :|
Db      3 G 3

RESULT 8
PT0571
T-cell receptor beta chain V-D-J region (141-1CM) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 15-Jun-2001 #sequence_revision 15-Jun-2001 #text_change 15-Jun-2001
C:Accession: PT0571
R:Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A:Reference number: PT0509; MUID:91277601; PMID:1711558
A:Accession: PT0571
A>Status: translation not shown
A:Molecule type: mRNA
A:Residues: 1-3 <FEE>
A:Experimental source: day 19 fetal thymus, strain BALB/c

```



## C;Keywords: T-cell receptor

Query Match 28.6%; Score 6; DB 3; Length 3;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
DB 3 G 3

## RESULT 9

S68328  
C;Species: Molgula manhattensis (fragment)  
C;Date: 15-Jun-2001 #sequence\_revision 15-Jun-2001 #text\_change 15-Jun-2001  
C;Accession: S68328  
R;Taylor, S.W.; Ross, M.M.; Waite, J.H.  
Arch. Biochem. Biophys. 324, 228-240, 1995  
A;Title: Novel 3,4-di- and 3,4,5-trihydroxyphenylalanine-containing polypeptides from the blood cell protein A - Molgula manhattensis (fragment)  
A;Reference number: S68328; MUID:8554314  
A;Accession: S68328  
A;Molecule type: protein  
A;Residues: 1-3 <TAY>

Query Match 28.6%; Score 6; DB 3; Length 3;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1  
DB 2 F 2

## RESULT 10

GKHU  
C;Species: Homo sapiens (man)  
C;Date: 15-Jun-2001 #sequence\_revision 15-Jun-2001 #text\_change 15-Mar-2004  
C;Accession: A01421  
R;Schlesinger, D.H.; Pickart, L.; Thaler, M.M.  
Experientia 33, 324-325, 1977  
A;Title: Growth-modulating serum tripeptide is glycyl-histidyl-lysine.  
A;Reference number: A01421; MUID:77162369; PMID:858356  
A;Accession: A01421  
A;Molecule type: protein  
A;Residues: 1-3 <SCH>  
A;Note: this serum tripeptide is found to stimulate growth of some cell types and to inhibit growth-modulating peptide - human

Query Match 28.6%; Score 6; DB 3; Length 3;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
DB 1 G 1

## RESULT 11

A60898  
C;Species: Gallus gallus (chicken)  
C;Date: 15-Jun-2001 #sequence\_revision 15-Jun-2001 #text\_change 15-Mar-2004  
C;Accession: A60898  
R;Audhya, T.; Kroon, D.; Heavner, G.; Vlamontes, G.; Goldstein, G.  
Science 231, 997-999, 1986  
A;Title: Tripeptide structure of bursin, a selective B-cell-differentiating hormone of the bursa of Fabricius  
A;Reference number: A60898; MUID:86122916; PMID:3484838  
A;Accession: A60898  
A;Molecule type: protein  
A;Residues: 1-3 <AUD>  
C;Keywords: amidated carboxyl end; hormone  
F;3/Modified site: amidated carboxyl end (Gly) #status experimental

Query Match 28.6%; Score 6; DB 3; Length 3;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
DB 3 G 3

## RESULT 12

A23751  
C;Species: Sus scrofa domestica (domestic pig)  
C;Date: 15-Jun-2001 #sequence\_revision 15-Jun-2001 #text\_change 15-Mar-2004  
C;Accession: A23751  
R;Hsi, K.L.; Chen, R.L.; Chen, Z.G.; Zhang, H.L.; Lu, Y.A.; Guo, S.Y.; Wu, S.X.; Tsou, K. Arch. Biochem. Biophys. 240, 178-183, 1985  
A;Reference number: A23751; MUID:85250425; PMID:4015098  
A;Accession: A23751  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-3 <HSI>

Query Match 28.6%; Score 6; DB 3; Length 3;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
DB 2 G 2

## RESULT 13

ECXAA  
C;Species: Anthopleura elegantissima  
C;Date: 31-Dec-1988 #sequence\_revision 31-Dec-1988 #text\_change 09-Jul-2004  
C;Accession: A26666  
R;Grimmelikhuijzen, C.J.P.; Graff, D.  
Proc. Natl. Acad. Sci. U.S.A. 83, 9817-9821, 1986  
A;Title: Isolation of <Glu-Gly-Arg-Phe-NH2 (Antho-RFamide), a neuropeptide from sea anemone  
A;Reference number: A26666; MUID:87092339; PMID:2879288  
A;Accession: A26666  
A;Molecule type: protein  
A;Residues: 1-4 <GRI>  
C;Cross-references: UNIPROT:P10419  
C;Comment: The function of this peptide is not known but it could act as a transmitter at the neuromuscular junction.  
C;Comment: Synthetic and natural peptides had identical properties.  
C;Superfamily: RFamide neuropeptide  
C;Keywords: amidated carboxyl end; neuropeptide; pyroglutamic acid  
F;1/Modified site: pyroglutamate carboxylic acid (Gln) #status experimental  
F;4/Modified site: amidated carboxyl end (Phe) #status experimental

Query Match 28.6%; Score 6; DB 1; Length 4;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
DB 2 G 2

## RESULT 14

D41654  
C;Species: Haemophilus parainfluenzae (fragment)  
C;Date: 12-Jun-1992 #sequence\_revision 12-Jun-1992 #text\_change 24-Feb-1995  
C;Accession: D41654  
R;Kroll, J.S.; Langford, P.R.; Loynds, B.M.  
J. Bacteriol. 173, 7449-7457, 1991  
A;Title: Copper-zinc superoxide dismutase of Haemophilus influenzae and Haemophilus parainfluenzae  
A;Reference number: A41654; MUID:92041655; PMID:1938942

A;Accession: D41654  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-4 <KRO>

Query Match 28.6%; Score 6; DB 2; Length 4;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1  
|  
Db 3 F 3

## RESULT 15

S53508

starvation-induced ribonuclease - tomato  
C;Species: Lycopersicon esculentum (tomato)  
C;Date: 01-Aug-1995 #sequence\_revision 01-Sep-1995 #text\_change 07-May-1999  
C;Accession: S53508  
R;Koeck, M.; Loeffler, A.; Abel, S.; Glund, K.  
Plant Mol. Biol. 27, 477-485, 1995  
A;Title: cDNA structure and regulatory properties of a family of starvation-induced ribonucleases  
A;Reference number: S53506; MUID:95201242; PMID:7894013  
A;Accession: S53508  
A;Status: preliminary  
A;Molecule type: protein  
A;Residues: 1-4 <KOE>

Query Match 28.6%; Score 6; DB 2; Length 4;  
Best Local Similarity 100.0%; Pred. No. 2.8e+05;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1  
|  
Db 1 F 1

Search completed: March 23, 2005, 15:13:39  
Job time : 38 secs

GenCore version 5.1.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 23, 2005, 14:51:07 ; Search time 171 Seconds

(without alignments)  
11.978 Million cell updates/sec

Title: SEQ3

Perfect score: 21

Sequence: 1 fglm 4

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 26

Minimum DB seq length: 0

Maximum DB seq length: 4

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: uniprot\_03.\*

2: uniprot\_sprot.\*

3: uniprot\_trembl.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	DB ID	Description
1	12	57.1	4	1 OCP1 OCTMI
2	9	42.9	4	1 ILME SEPOF
3	6	28.6	2	1 GWA SEPOF
4	6	28.6	3	1 GRWM HUMAN
5	6	28.6	4	1 ACH1 ACHFU
6	6	28.6	4	1 DCM1 PSECH
7	6	28.6	4	1 EOST HUMAN
8	6	28.6	4	1 FAR3 HIRME
9	6	28.6	4	1 FAR4 HIRME
10	6	28.6	4	1 FLRF ANTEL
11	6	28.6	4	1 FLRF HIRME
12	6	28.6	4	1 FLRN ANTEL
13	6	28.6	4	1 FMRP VACNI
14	6	28.6	4	1 FYRI ANTEL
15	6	28.6	4	1 OCP3 OCTMI
16	6	28.6	4	2 Q16047
17	5	23.8	4	1 DCWS PSECH
18	5	23.8	4	2 Q06AT0
19	4	19.0	4	2 Q08433
20	2	9.5	3	1 LUXE VIBFI
21	1	4.8	4	1 YLMI YEAST
22	0	0.0	3	1 THYL BOMOR
23	0	0.0	3	1 THYL NOTVI
24	0	0.0	3	1 THYL PIG
25	0	0.0	3	1 THYL SHEEP
26	0	0.0	4	1 TUFT_HUMAN

#### ALIGNMENTS

#### RESULT 1

OCP1 OCTMI  
ID AC P58648; STANDARD; PRT; 4 AA.  
DT 28-FEB-2003 (Rel. 41, Created)  
DT 28-FEB-2004 (Rel. 41, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Cardioactive peptides Ocp-1/Ocp-2.  
OS Octopus minor (Octopus).  
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;  
OC Octopodiformes; Octopoda; Incirrata; Octopodidae; Octopus.  
OX NCBI\_TaxID=89766;  
RN [1] SEQUENCE, SYNTHESIS, MASS SPECTROMETRY, AND CHARACTERIZATION.  
RC TISSUE=Brain;  
RX MEDLINE=20336815; PubMed=10876044; DOI=10.1016/S0196-9781(00)00201-1;  
RA Iwakoshi E., Hisada M., Minakata H.;  
RT "Cardioactive peptides isolated from the brain of a Japanese octopus,  
RT Octopus minor";  
RL Peptides 21:623-630(2000).  
CC -!- FUNCTION: Cardioactive; has both positive chronotropic and  
CC inotropic effects on the heart. Ocp-2 is a 1000 time less active  
CC than Ocp-1.  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- PTM: Ocp-2 has L-Phe instead of D-Phe.  
CC -!- MASS SPECTROMETRY: MW=395.2; METHOD=WALDI; RANGE=1-4; NOTE=Ref.1.  
KW D-amino acid; Direct protein sequencing; Hormone.  
FT MOD RES 2 D-phenylalanine (in form Ocp-1).  
SQ SEQUENCE 4 AA; 394 MW; 6AA879C810000000 CRC64;

Query Match

57.1%; Score 12; DB 1; Length 4;

Best Local Similarity 100.0%; Pred. No. 1.6e+06;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FG 2

DB 2 FG 3

#### RESULT 2

ILME SEPOF  
ID AC P83568; STANDARD; PRT; 4 AA.  
DT 29-MAR-2004 (Rel. 43, Created)  
DT 29-MAR-2004 (Rel. 43, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Pheromone peptide ILME.  
OS Sepia officinalis (Common cuttlefish).  
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;  
OC Decapodiformes; Sepioidea; Sepiidae; Sepia.  
OX NCBI\_TaxID=6610;  
RN [1] SEQUENCE, SUBCELLULAR LOCATION, TISSUE SPECIFICITY, AND MASS  
RP SPECTROMETRY.  
RC TISSUE=Egg;  
RX MEDLINE=20403899; PubMed=10944467; DOI=10.1006/bbrc.2000.3286;  
RA Zatylny C., Gagnon J., Boucaud-Camou E., Henry J.;  
RT "ILME: a waterborne pheromonal peptide released by the eggs of Sepia  
RT officinalis";  
RL Biochem. Biophys. Res. Commun. 275:217-222(2000).  
RN [2] SEQUENCE.  
RC TISSUE=Egg;  
RX MEDLINE=22197108; PubMed=12207899; DOI=10.1016/S0006-291X(02)00366-3;  
RA Zatylny C., Marvin L., Gagnon J., Henry J.;  
RT "Fertilization in Sepia officinalis: the first mollusk sperm-  
RT attracting peptide";  
RL Biochem. Biophys. Res. Commun. 296:1186-1193(2002).  
CC -!- FUNCTION: Has myotropic activity targeting the genital tract.  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- TISSUE SPECIFICITY: Follicle, fully grown oocyte and egg(EC2).  
CC -!- MASS SPECTROMETRY: MW=505.4; METHOD=WALDI; RANGE=1-4; NOTE=Ref.1.  
KW Direct protein sequencing; Pheromone.

SQ SEQUENCE 4 AA; 505 MW; 6B1697203000000000 CRC64;  
 Query Match 42.9%; Score 9; DB 1; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
 Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 LM 4  
 Db 2 LM 3

RESULT 3  
 GWA SEPOF  
 ID GWA SEPOF STANDARD; PRT; 2 AA.  
 AC P83570;  
 DT 29-MAR-2004 (Rel. 43, Created)  
 DT 29-MAR-2004 (Rel. 43, Last sequence update)  
 DT 05-JUL-2004 (Rel. 44, Last annotation update)  
 DE Neuropeptide GWA.  
 OS Sepia officinalis (Common cuttlefish).  
 OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;  
 OC Decapodiformes; Sepioidea; Sepiidae; Sepia.  
 OX NCBI\_TaxID=6610;  
 RN [1]  
 RP SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND AMIDATION.  
 RC TISSUE=Optic lobe;  
 RX MEDLINE=98100358; PubMed=9437704; DOI=10.1016/S0196-9781(97)00241-6;  
 RA Henry J., Favrel P., Boucaud-Camou E.;  
 RT "Isolation and identification of a novel Ala-Pro-Gly-Tyr-amide-related  
 peptide inhibiting the motility of the mature oviduct in the  
 cuttlefish, Sepia officinalis.";  
 RL Peptides 18:1469-1474(1997).  
 CC -1- FUNCTION: Regulatory neuropeptide with myotropic activity  
 targeting the distal oviduct. Inhibits the motility of the oviduct  
 by decreasing conus, frequency and amplitude of contractions.  
 CC -1- SUBCELLULAR LOCATION: Secreted.  
 CC -1- MASS SPECTROMETRY: MW=259.9; METHOD=MALDI; RANGE=1-2; NOTE=Ref.1.  
 KW Amidation; Direct protein sequencing; Neuropeptide.  
 FT MOD RES 2 2 Tryptophan amide.  
 SQ SEQUENCE 2 AA; 261 MW; 73781000000000000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 2;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
 Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
 Db 1 G 1

RESULT 4  
 GRWM HUMAN  
 ID GRWM HUMAN STANDARD; PRT; 3 AA.  
 AC P01157;  
 DT 21-JUL-1986 (Rel. 01, Created)  
 DT 21-JUL-1986 (Rel. 01, Last sequence update)  
 DT 05-JUL-2004 (Rel. 44, Last annotation update)  
 DE Growth-modulating peptide.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 OX NCBI\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE.  
 RX MEDLINE=77162369; PubMed=858356;  
 RA Schlesinger D.H., Pickart L., Thaler M.M.;  
 RT "Growth-modulating serum tripeptide is glycyl-histidyl-lysine.";  
 RL Experientia 33:324-325(1977).  
 CC -1- MISCELLANEOUS: This serum tripeptide has been found to stimulate  
 growth of some cell types and to inhibit other types in vitro.  
 DR GO:GO:0001556; P:regulation of cell growth; NAS.  
 KW Direct protein sequencing.  
 SQ SEQUENCE 3 AA; 340 MW; 6331E810000000000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 3;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
 Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
 Db 1 G 1

RESULT 5  
 ACHI ACHFU  
 ID ACHI ACHFU STANDARD; PRT; 4 AA.  
 AC P35904;  
 DT 01-JUN-1994 (Rel. 29, Created)  
 DT 01-JUN-1994 (Rel. 29, Last sequence update)  
 DT 25-OCT-2004 (Rel. 45, Last annotation update)  
 DE Achatin-I.  
 OS Achatina fulica (Giant African snail).  
 OC Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata; Stylommatophora;  
 OC Sigmurethra; Achatinoidea; Achatinidae; Achatina.  
 OX NCBI\_TaxID=6530;  
 RN [1]  
 RP SEQUENCE, CHARACTERIZATION, AND SYNTHESIS.  
 RC STRAIN=Ferussac; TISSUE=Ganglion;  
 RX MEDLINE=89273551; PubMed=2597281;  
 RA Kanatani Y., Minakata H., Kenny P.T.M., Iwashita T., Watanabe K.,  
 RA Funase K., Sun X.P., Yongsiri A., Kim K.H., Novales-Li P.,  
 RA Novales E.T., Kanapi C.G., Takeuchi H., Nomoto K.;  
 RT "Achatin-I, an endogenous neuroexcitatory tetrapeptide from Achatina  
 fulica Ferussac containing a D-amino acid residue.";  
 RL Biochem. Biophys. Res. Commun. 160:1015-1020(1989).  
 RN [2]  
 RP CHARACTERIZATION.  
 RC STRAIN=Ferussac; TISSUE=Heart atrium;  
 RX MEDLINE=91264856; PubMed=1675568;  
 RA Fujimoto K., Kubota I., Yasuda-Kamatani Y., Minakata H., Nomoto K.,  
 RA Yoshida M., Harada A., Muneoka Y., Kobayashi M.;  
 RT "Purification of achatin-I from the atria of the African giant snail,  
 Achatina fulica, and its possible function.";  
 RL Biochem. Biophys. Res. Commun. 177:847-853(1991).  
 RN [3]  
 RP CRYSTALLIZATION.  
 RX MEDLINE=93014529; PubMed=1399265;  
 RA Iwashita T., In Y., Doi M., Inoue M., Yasuda-Kamatani Y., Minakata H.,  
 RA Iwashita T., Nomoto K.;  
 RT "Crystal structure and molecular conformation of achatin-I (H-Gly-D-  
 Phe-Ala-Asp-OH), an endogenous neuropeptide containing a D-amino acid  
 residue.";  
 RL Int. J. Pept. Protein Res. 39:258-264(1992).  
 CC -1- FUNCTION: Neuroexcitatory peptide; increases the impulse frequency  
 and produces a spike broadening of the identified heart excitatory  
 neuron (PON); also enhances the amplitude and frequency of the  
 heart beat. Has also an effect on several other muscles.  
 CC PIR; A32480; A32480.  
 KW D-amino acid; Direct protein sequencing; Hormone.  
 FT MOD RES 2 2 D-phenylalanine.  
 SQ SEQUENCE 4 AA; 408 MW; 6AADD9C810000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
 Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2  
 Db 1 G 1

RESULT 6  
 DCML PSECH  
 ID DCML PSECH STANDARD; PRT; 4 AA.  
 AC P19916;  
 DT 01-FEB-1991 (Rel. 17, Created)

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DT 01-FEB-1991 (Rel. 17, Last sequence update)
DE 05-JUL-2004 (Rel. 44, Last annotation update)
DE Carbon monoxide dehydrogenase large chain (EC 1.2.99.2) (CO
DE dehydrogenase subunit L) (CO-DH L) (Fragment).
GN Name=cutL;
OS Pseudomonas carboxydohydrogena.
OC Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
OC Bradyrhizobiaceae.
OX NCBI_TaxID=290;
RN [1]
RP SEQUENCE.
RX MEDLINE=90055678; PubMed=2818128;
RA Kraut M., Hugendieck I., Herwig S., Meyer O.;
RT "Homology and distribution of CO dehydrogenase structural genes in
RT carboxydrotrophic bacteria.";
RL Arch. Microbiol. 152:335-341(1989).
CC -!- FUNCTION: Catalyzes the oxidation of carbon monoxide to carbon
CC dioxide.
CC -!- CATALYTIC ACTIVITY: CO + H(2)O + A = CO(2) + AH(2).
CC -!- COFACTOR: Binds 1 copper(I) ion, 1 molybdenum(VI) ion and 1
CC molybdopterin cytosine dinucleotide (MCD) per subunit.
CC -!- SUBUNIT: Heterotrimer consisting of a large, a medium and a small
CC subunit.
DR PIR; P0140; P0140.
KW Direct protein sequencing; Molybdenum; Oxidoreductase.
FT NON TER
SQ SEQUENCE 4 AA; 441 MW; 7761E876F00000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 G 2
Db 2 G 2

RESULT 7
EOSI HUMAN
ID EOSI_HUMAN STANDARD; PRT; 4 AA.
AC P02731;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Eosinophilic tetrapeptides.
OS Homo sapiens (Human).
OC Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE.
RX MEDLINE=76078412; PubMed=1060093;
RA Goetzl E.J., Austen K.F.;
RT "Purification and synthesis of eosinophilic tetrapeptides of
RT human lung tissue: identification as eosinophil chemotactic factor of
RT anaphylaxis.";
RL Proc. Natl. Acad. Sci. U.S.A. 72:4123-4127(1975).
CC -!- MISCELLANEOUS: These peptides are released from mast cells in lung
CC (and other tissues) during hypersensitivity reactions
CC (anaphylaxis). Their activities, preferentially affecting
CC eosinophils, include chemotaxis, chemotactic deactivation, release
CC of enzymes, and stimulation of the hexose monophosphate shunt.
DR GO; GO:006935; P:chemotaxis; IDA.
DR GO; GO:006955; P:immune response; IDA.
KW Direct protein sequencing.
FT VARIANT 1 1 V -> A (in other peptide).
SQ SEQUENCE 4 AA; 390 MW; 6B05B8C2A00000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 G 2
Db 2 G 2

RESULT 8
FAR3 HIRME
ID FAR3_HIRME STANDARD; PRT; 4 AA.
AC P42562;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE FMRFamide-like neuropeptide YLRF-amide.
OS Hirudo medicinalis (Medicinal leech).
OC Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
OC Arhynchobdellida; Hirudiniiformes; Hirudinidae; Hirudo.
OX NCBI_TaxID=6421;
RN [1]
RP SEQUENCE.
RX MEDLINE=92195954; PubMed=1686933; DOI=10.1016/0196-9781(91)90035-N;
RA Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;
RT "Identification of Rfamide neuropeptides in the medicinal leech.";
RL Peptides 12:897-908(1991).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
CC family.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD RES 4 4 Phenylalanine amide.
SQ SEQUENCE 4 AA; 598 MW; 69D4073B300000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 F 1
Db 4 F 4

RESULT 9
FAR4 HIRME
ID FAR4_HIRME STANDARD; PRT; 4 AA.
AC P42563;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE FMRFamide-like neuropeptide YMRF-amide.
OS Hirudo medicinalis (Medicinal leech).
OC Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
OC Arhynchobdellida; Hirudiniiformes; Hirudinidae; Hirudo.
OX NCBI_TaxID=6421;
RN [1]
RP SEQUENCE.
RX MEDLINE=92195954; PubMed=1686933; DOI=10.1016/0196-9781(91)90035-N;
RA Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;
RT "Identification of Rfamide neuropeptides in the medicinal leech.";
RL Peptides 12:897-908(1991).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
CC family.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD RES 4 4 Phenylalanine amide.
SQ SEQUENCE 4 AA; 616 MW; 69D4068B300000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 F 1
Db 4 F 4

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RL Peptides 15:31-36(1994).  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- SIMILARITY: Belongs to the FAP (FMR) family.  
CC Family.  
KW Amidation; Direct protein sequencing; Neuropeptide.  
FT MOD RES 4 4 Phenylalanine amide.  
SQ SEQUENCE 4 AA; 582 MW; 69D40729A0000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1  
Db 1 F 1

RESULT 12  
FLRN ANTEL  
ID FLRN ANTEL STANDARD; PRT; 4 AA.  
AC P58707;  
DT 28-FEB-2003 (Rel. 41, Created)  
DT 28-FEB-2003 (Rel. 41, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Antho-RNamide.  
OS Anthopleura elegantissima (Sea anemone).  
OC Eukaryota; Metazoa; Cnidaria; Anthozoa; Zoantharia; Actiniaria;  
OC Nynanthaeae; Actiniidae; Anthopleura.  
OX NCBI\_TaxID=6110;  
RN [1]  
RP SEQUENCE, AND MASS SPECTROMETRY.  
RX MEDLINE=90319122; PubMed=1973541;  
RA Grimmelikhuijzen C.J.P., Rinehart K.L. Jr., Jacob E., Graff D.,  
RA Reinscheid R.K., Nothacker H.-P., Staley A.L.;  
RT "Isolation of L-3-phenylacetyl-Leu-Arg-Asn-NH2 (Antho-RNamide), a sea  
RT anemone neuropeptide containing an unusual amino-terminal blocking  
RT group.";  
RL Proc. Natl. Acad. Sci. U.S.A. 87:5410-5414(1990).  
CC -!- SUBCELLULAR LOCATION: Secreted.  
CC -!- TISSUE SPECIFICITY: Neuron specific.  
CC -!- MASS SPECTROMETRY: MW=549.3; METHOD=FAB; RANGE=1-4; NOTE=Ref.1.  
DR PR; A35779; A35779.  
KW Amidation; Direct protein sequencing; Neuropeptide.  
FT MOD RES 1 1 3-phenylacetic acid.  
FT MOD RES 4 4 Asparagine amide.  
SQ SEQUENCE 4 AA; 549 MW; 64540729A0000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.6e+06;  
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1  
Db 1 F 1

RESULT 13  
FMRF MACNI  
ID FMRF MACNI STANDARD; PRT; 4 AA.  
AC F01162;  
DT 21-JUL-1986 (Rel. 01, Created)  
DT 21-JUL-1986 (Rel. 01, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE FMRFamide (Peak C) (Cardioexcitatory neuropeptide).  
OS Macrocallista nimbosa (Sun-ray clam),  
OS Nereis virens (Sandworm),  
OS Hirudo medicinalis (Medicinal leech), and  
OS Helisoma trivolvis (Snail).  
OC Eukaryota; Metazoa; Mollusca; Bivalvia; Heteroconchia; Veneroidea;  
OC Veneroidea; Veneridae; Macrocallista.  
OX NCBI\_TaxID=6594, 6353, 6421, 27815,  
RN [1]  
RP SEQUENCE, AND SYNTHESIS

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RC SPECIES=M.nimbosa; TISSUE=Cerebral pedal, and visceral ganglion;
RX MEDLINE=77215956; PubMed=877582;
RA Price D.A., Greenberg M.J.;
RT "Structure of a molluscan cardioexcitatory neuropeptide.";
RL Science 197:670-671(1977).
RN [2]
RP SEQUENCE, AND CHARACTERIZATION.
RC SPECIES=M.nimbosa; TISSUE=Ganglion;
RX MEDLINE=78012038; PubMed=909875;
RA Price D.A., Greenberg M.J.;
RT "Purification and characterization of a cardioexcitatory neuropeptide
from the central ganglia of a bivalve mollusc.";
RL Prep. Biochem. 7:261-281(1977).
RN [3]
RP SEQUENCE.
RC SPECIES=N.virens;
RX MEDLINE=90259866; PubMed=2342992; DOI=10.1016/0196-9781(90)90113-J;
RA Krainiak K.G., Price D.A.;
RT "Authentic FMRFamide is present in the polychaete Nereis virens.";
RL Peptides 11:75-77(1990).
RN [4]
RP SEQUENCE.
RC SPECIES=H.medicalis;
RX MEDLINE=92195954; PubMed=1686933; DOI=10.1016/0196-9781(91)90035-N;
RA Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;
RT "Identification of RFamide neuropeptides in the medicinal leech.";
RL Peptides 12:897-908(1991).
RN [5]
RP SEQUENCE.
RC SPECIES=H.trivoltis; TISSUE=Kidney;
RX MEDLINE=94286417; PubMed=7912428; DOI=10.1016/0196-9781(94)90166-X;
RA Madrid K.P., Price D.A., Greenberg M.J., Khan H.R., Saleuddin A.S.M.;
RT "FMRFamide-related peptides from the kidney of the snail, Helisoma
trivoltis.";
RL Peptides 15:31-36(1994).
RC -!- FUNCTION: Myoactive; cardioexcitatory substance. Pharmacological
activities include augmentation, induction, and regularization of
cardiac contraction.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
family.
DR PIR; A01426; ECNK.
DR PIR; A60418; A60418.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD RES 4 4 Phenylalanine amide.
SQ SEQUENCE 4 AA; 600 MW; 69D40699A0000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1
DB 1 F 1

RESULT 14
FYRI ANTEL STANDARD; PRT; 4 AA.
AC P58706.
DT 28-FEB-2003 (Rel. 41, Created)
DT 05-JUL-2004 (Rel. 44, Last sequence update)
DE Antho-Riamide I [Contains: Antho-Riamide II].
OS Anthopleura elegantissima (Sea anemone).
OC Eukaryota; Metazoa; Cnidaria; Anthozoa; Zoantharia; Actiniaria;
OC Nynantheae; Actiniidae; Anthopleura.
OX NCBI_TaxID=6110;
RN [1]
RP SEQUENCE.
RX MEDLINE=92270459; PubMed=1821096; DOI=10.1016/0196-9781(91)90190-Z;
RA Nothacker H.-P., Rinehart K.L. Jr., McFarlane I.D.,
RA Grimmelikhuijzen C.J.P.;

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RT "Isolation of two novel neuropeptides from sea anemones: the unusual,
biologically active L-3-phenyllactyl-Tyr-Arg-Ile-NH2 and its des-
phenyllactyl fragment Tyr-Arg-Ile-NH2.";
RL Peptides 12:1165-1173(1991).
RN [2]
RP FUNCTION.
RX MEDLINE=93391436; PubMed=8397415;
RA McFarlane I.D., Hudman D., Nothacker H.-P., Grimmelikhuijzen C.J.P.;
RT "The expansion behaviour of sea anemones may be coordinated by two
inhibitory neuropeptides, Antho-Riamide and Antho-Riamide II.";
RL Proc. R. Soc. Lond., B, Biol. Sci. 253:183-188(1993).
CC -!- FUNCTION: Inhibits spontaneous contractions in several muscle
groups. May be involved in the expansion phase of feeding
behaviour in sea anemones.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Neuron specific.
KW Amidation; Direct protein sequencing; Neuropeptide.
FT CHAIN 1 4 Antho-Riamide I.
FT CHAIN 2 4 Antho-Riamide II.
FT MOD RES 1 1 3-phenyllactic acid.
FT MOD RES 4 4 Isoleucine amide.
SQ SEQUENCE 4 AA; 598 MW; 60441B59A0000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 F 1
DB 1 F 1

RESULT 15
OCP3 OCTMI STANDARD; PRT; 4 AA.
ID OCP3 OCTMI STANDARD; PRT; 4 AA.
AC P58649.
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Cardioactive peptides Ocp-3/Ocp-4.
OS Octopus minor (Octopus).
OC Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
OC Octopodiformes; Octopoda; Incirrata; Octopodidae; Octopus.
OX NCBI_TaxID=89766;
RN [1]
RP SEQUENCE, SYNTHESIS, MASS SPECTROMETRY, AND CHARACTERIZATION.
RC TISSUE=Brain;
RX MEDLINE=20336815; PubMed=10876044; DOI=10.1016/S0196-9781(00)00201-1;
RA Iwakoshi E., Hisada M., Minakata H.;
RT "Cardioactive peptides isolated from the brain of a Japanese octopus,
Octopus minor.";
RL Peptides 21:623-630(2000).
CC -!- FUNCTION: Cardioactive; has both positive chronotropic and
inotropic effects on the heart. Ocp-4 is a 1000 time less active
than Ocp-3.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- PTM: Ocp-4 has D-Ser instead of L-Ser.
CC -!- MASS SPECTROMETRY: MW=395.2; METHOD=MALDI; RANGE=1-4; NOTE=Ref.1.
KW D-amino acid; Direct protein sequencing; Hormone.
FT MOD RES 2 2 D-serine (in form Ocp-4).
SQ SEQUENCE 4 AA; 463 MW; 6AB365B810000000 CRC64;

Query Match 28.6%; Score 6; DB 1; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.6e+06;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 G 2
DB 1 G 1

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Search completed: March 23, 2005, 15:10:03  
Job time : 172 secs

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OM protein - protein search, using sw model

Run on: March 23, 2005, 14:52:02 ; Search time 164 Seconds  
(without alignments)  
9.433 Million cell updates/sec

Title: SEQ3

Perfect score: 21

Sequence: 1 fglm 4

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 19815

Minimum DB seq length: 0

Maximum DB seq length: 4

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*  
1: Geneseqp1980s:\*  
2: Geneseqp1990s:\*  
3: Geneseqp2000s:\*  
4: Geneseqp2001s:\*  
5: Geneseqp2002s:\*  
6: Geneseqp2003as:\*  
7: Geneseqp2003bs:\*  
8: Geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	21	100.0	4	AAW41683	Peptide u
2	21	100.0	4	AAY31075	Non-cross
3	21	100.0	4	AAB23026	Human/rat
4	21	100.0	4	AAY67577	P antagonist
5	21	100.0	4	AAB91447	Tachykini
6	21	100.0	4	AB10091	Substance
7	21	100.0	4	AAY77846	Tachykini
8	21	100.0	4	AD594198	High acti
9	21	100.0	4	ADR43772	Human mag
10	18	85.7	4	AAP61654	Sequence
11	18	85.7	4	AAP71301	Peptide c
12	18	85.7	4	AAW41686	Tetrapept
13	18	85.7	4	ABB10092	Substance
14	16	76.2	4	AAP61707	Sequence
15	16	76.2	4	AAP71312	Peptide c
16	16	76.2	4	AAY23485	V beta 6
17	16	76.2	4	AAV23485	Prodrug o
18	16	76.2	4	AAV23485	Typical t
19	16	76.2	4	AAV23485	Enzyme cl
20	16	76.2	4	AB88046	Exemplary
21	15	71.4	3	AD178809	P antagonist
22	15	71.4	3	AAY67578	Tachykini
23	15	71.4	4	AAV23485	Peptide w
24	15	71.4	4	AAW77469	Tetrapept
25	15	71.4	4	AAW41684	Tetrapept

26	15	71.4	4	AAW41685	Tetrapept
27	15	71.4	4	AAW41685	Tetrapept
28	15	71.4	4	AAW41685	Tetrapept
29	14	66.7	4	AAW41685	Tetrapept
30	14	66.7	4	AAW41685	Tetrapept
31	14	66.7	4	AAW41685	Tetrapept
32	14	66.7	4	AAW41685	Tetrapept
33	14	66.7	4	AAW41685	Tetrapept
34	14	66.7	4	AAW41685	Tetrapept
35	14	66.7	4	AAW41685	Tetrapept
36	14	66.7	4	AAW41685	Tetrapept
37	14	66.7	4	AAW41685	Tetrapept
38	14	66.7	4	AAW41685	Tetrapept
39	14	66.7	4	AAW41685	Tetrapept
40	13	61.9	3	AAW41685	Tetrapept
41	13	61.9	4	AAW41685	Tetrapept
42	13	61.9	4	AAW41685	Tetrapept
43	13	61.9	4	AAW41685	Tetrapept
44	13	61.9	4	AAW41685	Tetrapept
45	13	61.9	4	AAW41685	Tetrapept

## ALIGNMENTS

## RESULT 1

AAW41683  
ID AAW41683 standard; peptide; 4 AA.

XX AAW41683;

XX 09-JUN-1998 (first entry)

XX Peptide used in ophthalmic drug to treat corneal disorders.

KW Ophthalmic drug; corneal disorder; ulcer; epithelial peeling; dry eye;  
KW keratitis; insulin like growth factor-I; IGF-I; eye drop.

OS Synthetic.

XX Key Location/Qualifiers

FT Modified-site 4 /note= "C-terminal amide"

XX WO9749419-A1.

XX 31-DEC-1997.

XX 11-JUN-1997; 97WO-JP002015.

XX 26-JUN-1996; 96JP-00165612.

XX (SANT ) SANTEN PHARM CO LTD.

XX Nishida T, Nakamura M, Nakata K;

XX WPI; 1998-076907/07.

XX Ophthalmic drug composition containing tetra:peptide - is useful as  
XX corneal disorder remedy for corneal ulcer, corneal epithelial peeling,  
XX dry eye, keratitis.

XX Claim 1; Page 15; 19pp; Japanese.

XX The present sequence represents a tetrapeptide which is the active  
XX ingredient in an ophthalmic drug composition. It is used together with  
XX insulin like growth factor-I (IGF-I), to treat corneal disorders such as  
XX corneal ulcer, corneal epithelial peeling, dry eye and keratitis. The  
XX dosage is 0.1-5000 (preferably 1-1000) mg/day of the tetrapeptide and  
XX 0.001-100 (preferably 0.01-10) mg/day of IGF-I. The preferable form of  
XX the composition is eye drops

XX Sequence 4 AA;

Query Match 100.0%; Score 21; DB 2; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 ||||  
 Db 1 FGLM 4

RESULT 2  
 AAY31075  
 ID AAY31075 standard; peptide; 4 AA.  
 XX  
 AC AAY31075;  
 XX  
 DT 21-OCT-1999 (first entry)  
 XX  
 DE Non-crosslinked protein particle peptide 124.  
 XX  
 KW Non-crosslinked protein particle; diagnostic; therapy; monodisperse;  
 KW albumin; haemoglobin; nanometer; micrometer; clearance.  
 XX  
 OS Synthetic.  
 XX

FH Key Location/Qualifiers  
 FT Modified-site 4 /note= "C-terminal amide"  
 FT XX  
 PN US945033-A.  
 XX  
 PD 31-AUG-1999.  
 XX  
 PF 12-NOV-1996; 96US-00747137.  
 XX  
 PR 15-JAN-1991; 91US-00641720.  
 PR 13-OCT-1992; 92US-00959560.  
 PR 01-JUN-1993; 93US-00069831.  
 PR 14-MAR-1994; 94US-00212546.  
 XX

PA (HEMO-) HEMOSPHERE INC.  
 XX  
 PI Yen RCK;  
 XX  
 DR WPI; 1999-508153/42.  
 XX

PT Non-crosslinked protein particles for therapeutic and diagnostic use.  
 PS Example 22; Col 103-104; 65pp; English.  
 XX

CC This invention describes a novel aqueous suspension of monodisperse  
 CC particles on non-crosslinked, non-denatured albumin (50-5000 nm) which is  
 CC stable against dissolving upon dilution with an alcohol-free aqueous  
 CC medium. The method involves (a) forming an aqueous solution containing  
 CC albumin and hemoglobin and (b) treating the aqueous solution with an  
 CC alcohol to cause the solution to become turbid. The particles are useful  
 CC as agents for in vivo administration, either of their own administration  
 CC or as a vehicle for other therapeutic or diagnostic agents. The method  
 CC permits the formation of albumin and hemoglobin particles in the  
 CC nanometer and micrometer size range, in a form closer to their natural  
 CC form than the forms of the prior art. The particles therefore constitute  
 CC a more closely controlled agent for in vivo administration, with greater  
 CC ease of clearance from the body after their period of usefulness.  
 CC AAY30952-Y31135 represent peptide used in the method of the invention  
 XX

SQ Sequence 4 AA;  
 Query Match 100.0%; Score 21; DB 2; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 ||||  
 Db 1 FGLM 4

RESULT 4  
 AAY67577  
 ID AAY67577 standard; peptide; 4 AA.  
 XX

Db 1 FGLM 4  
 ||||  
 ID AAB23026 standard; peptide; 4 AA.  
 XX  
 AC AAB23026;  
 XX  
 DT 16-JAN-2001 (first entry)  
 XX  
 DE Human/rat tachykinin Substance P C-terminal tetrapeptide.  
 XX  
 KW Substance P; tachykinin; human; rat; magnesium binding defect;  
 KW sodium sensitive essential hypertension; insulin resistance;  
 KW type 2 diabetes; antibody; immunoassay; quantification.  
 XX  
 OS Homo sapiens.  
 OS Rattus sp.  
 XX

FH Key Location/Qualifiers  
 FT Modified-site 4 /note= "C-terminal amide"  
 FT XX  
 PN WO200054053-A1.  
 XX  
 PD 14-SEP-2000.  
 XX  
 PF 09-MAR-2000; 2000WO-US003707.  
 XX  
 PR 10-MAR-1999; 99US-00265690.  
 XX  
 PA (WELL/) WELLS I C.  
 XX  
 PI Wells IC;  
 XX  
 DR WPI; 2000-587457/55.  
 XX

PT Detecting magnesium binding defects associated with abnormal  
 PT physiological states such as sodium-sensitive essential hypertension and  
 PT type 2 insulin-resistant diabetes mellitus, comprises measuring a  
 PT specific pentapeptide in blood.  
 XX

PS Disclosure; Page 5; 21pp; English.  
 XX

CC The invention relates to a method for detecting magnesium binding  
 CC defects. The method comprises quantitating a tachykinin C-terminal  
 CC pentapeptide (e.g., AAB23025) and its degradation products (e.g.,  
 CC AAB23026) in blood using an antibody specific for the generalised  
 CC mammalian tachykinin C-terminal pentapeptide Phe-(Phe/Val)-Gly-Leu-Met-  
 CC NH<sub>2</sub> (AAB23028). The method is useful for detecting cellular magnesium  
 CC binding defects which are associated with abnormal physiological states  
 CC such as sodium-sensitive essential hypertension and type 2 diabetes  
 CC mellitus. The present sequence represents the C-terminal 4 amino acids of  
 CC the tachykinin Substance P (AAB23027) from human and rat. This is a  
 CC degradation product of the Substance P C-terminal pentapeptide (AAB23025)  
 CC and may also be assayed according to the method of the invention  
 XX

SQ Sequence 4 AA;  
 Query Match 100.0%; Score 21; DB 3; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 ||||  
 Db 1 FGLM 4

RESULT 4  
 AAY67577  
 ID AAY67577 standard; peptide; 4 AA.  
 XX

AC AAY67577;  
 DT 19-MAY-2000 (first entry)  
 DE P antagonist peptide #5.  
 KW Pharmaceutical; veterinary; gonadotropin-releasing hormone; GnRH;  
 KW pore-forming agent; lecithin; stearin; P antagonist.  
 XX Unidentified.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FH Modified-site 4  
 FT /note= "C-terminal amide"  
 FT  
 XX WO200004897-A1.  
 XX  
 XX 03-FEB-2000.  
 XX  
 XX 20-JUN-1999; 99WO-AU000585.  
 XX  
 XX 20-JUL-1998; 98AU-00004730.  
 XX 20-JUL-1998; 98AU-00004731.  
 XX 13-MAY-1999; 99AU-0000324.  
 XX (PEPT-) PEPTTECH LTD.  
 PA  
 XX Trigg TE, Walsh JD, Rathjen DA;  
 XX WPI; 2000-182528/16.  
 XX  
 XX Bioimplant formulation for sustained delivery of an active agent over 7  
 FT days to 2 years, comprises active agent, pore-forming agent and stearin.  
 PT  
 XX Claim 20; Page 21; 37pp; English.  
 PS  
 XX The invention provides a pharmaceutical and/or veterinary formulation  
 CC that comprises 2 -30% of active agents which include a gonadotropin-  
 CC releasing hormone (GnRH) agonist, 0.5 - 20% of a pore-forming agent which  
 CC is not lecithin, and the remainder stearin. The formulation is useful as  
 CC a sustained release implant which can deliver the active agent for a  
 CC period of 7 days to 2 years. Sequences AAY67573-578 represent P  
 CC antagonist peptides used in the composition  
 XX  
 SQ Sequence 4 AA;  
 Query Match 100.0%; Score 21; DB 3; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 FGLM 4  
 Db 1 FGLM 4  
 RESULT 5  
 ID AAB91447  
 XX AAB91447 standard; peptide; 4 AA.  
 AC  
 XX AAB91447;  
 XX  
 DT 22-JUN-2001 (first entry)  
 XX Tachykinins peptide SEQ ID NO:623.  
 DE  
 XX Protection; endogenous therapeutic peptide; peptidase; conjugation;  
 KW blood component; modification; succinimidyl; maleimido group; amino;  
 KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.  
 XX Homo sapiens.  
 OS Synthetic.  
 OS  
 XX WO200069900-A2.  
 FN

XX 23-NOV-2000.  
 XX  
 XX 17-MAY-2000; 2000WO-US013576.  
 XX  
 XX 17-MAY-1999; 99US-0134406P.  
 PR 10-SEP-1999; 99US-0153406P.  
 PR 15-OCT-1999; 99US-0159783P.  
 XX (CONJ-) CONJUCHEM INC.  
 PA  
 XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;  
 XX WPI; 2001-112059/12.  
 XX  
 XX Modifying and attaching therapeutic peptides to albumin prevents  
 FT peptidase degradation, useful for increasing length of in vivo activity.  
 PT  
 XX Disclosure; Page 402; 733pp; English.  
 PS  
 XX The present invention describes a modified therapeutic peptide (I)  
 CC comprising a therapeutically active amino acid region (III) and a  
 CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to  
 CC a less therapeutically active amino acid region (IV), which covalently  
 CC bonds with amino/hydroxyl/thiol groups on blood components to form a  
 CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.  
 CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth  
 CC factors and neurotransmitters, to protect them from peptidase activity in  
 CC vivo for the treatment of various disorders. Endogenous therapeutic  
 CC peptides are not suitable as drug candidates as they require frequent  
 CC administration due to rapid degradation by peptidases in the body.  
 CC Modifying and attaching therapeutic peptides to albumin prevents or  
 CC reduces the action of peptidases to increase length of activity (half  
 CC life) and specificity as bonding to large molecules decreases  
 CC intracellular uptake and interference with physiological processes.  
 CC AAB90829 to AAB92441 represent peptides which can be used in the  
 CC exemplification of the present invention  
 XX  
 SQ Sequence 4 AA;  
 Query Match 100.0%; Score 21; DB 4; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 FGLM 4  
 Db 1 FGLM 4  
 RESULT 6  
 ID ABB10091  
 XX ABB10091 standard; peptide; 4 AA.  
 AC  
 XX ABB10091;  
 XX  
 DT 26-JUL-2002 (first entry)  
 XX  
 DE Substance P analog used in wound healing treatment#14.  
 XX  
 XX Wound healing; insulin-like growth factor-I; tear; abrasion; skin ulcer;  
 KW surgical incision; burn.  
 KW  
 XX Unidentified.  
 OS  
 XX WO200213853-A1.  
 FN  
 XX 21-FEB-2002.  
 PD  
 XX 10-AUG-2001; 2001WO-JP006933.  
 PF  
 XX 10-AUG-2000; 2000JP-00242489.  
 PR 28-NOV-2000; 2000JP-00361388.  
 PR  
 XX

This invention relates to novel therapeutic compounds and methods used for treating mammals with disorders such as salt-insensitive hypertension. The mono-peptide compounds of the invention are derived from butadienes, ethylenes and propanes. The compounds of the invention are used to correct a defect in magnesium binding within the plasma membranes of somatic cells which results in a decrease in the intracellular concentration of magnesium ions. These compounds may be used in the treatment of a mammal affected with magnesium binding defect, salt-sensitive (particularly hypertension), insulin resistance of type 2 diabetes mellitus and pre-eclampsia/eclampsia. The compounds of the invention have an advantage over prior art compounds in that these compounds are biologically stable. The present sequence represents the tetrapeptide from the C terminal sequence of tachykinin known as substance P, this peptide is sufficient to correct the magnesium binding defect responsible for causing hypertension

Sequence 4 AA;

.Query Match 100.0%; Score 21; DB 5; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
|||  
Db 1 FGLM 4

RESULT 8  
ADE94198  
ID ADE94198 standard; peptide; 4 AA.  
XX AC ADE94198;  
XX DT 12-FEB-2004 (first entry)  
XX DE High activity minimal IGF-1-derived peptide fragment #10.  
KW ophthalmological; dermatological; vulnery; insulin growth factor 1;  
KW IGF-1; ophthalmology; dermatology; keratic injury; wound healing; skin;  
KW corneal ulcer; exfoliation of corneal epithelium; keratitis; dry eye;  
KW scratch; surgical cutting; skin ulcer; burns.  
OS Homo sapiens.  
FH Key Location/Qualifiers  
FT Misc-difference 4  
FT /note= "amidated C-terminus"  
XX W02003048192-A1.  
XX PD 12-JUN-2003.  
XX PF 03-DEC-2002; 2002WO-JP012632.  
XX PR 03-DEC-2001; 2001JP-00368103.  
XX PA (SANT ) SANTEN PHARM CO LTD.  
XX PA (NISH/) NISHIDA T.  
XX PI Nishida T, Inui M, Nakamura M;  
XX WPI; 2003-505280/47.  
XX DR  
XX PT Novel peptides based on minimum activity expression units of insulin-like  
XX growth factor-1, applicable in remedies in ophthalmology and dermatology  
XX for treating keratic injury and promoting wound healing in skin.  
XX Claim 3; Page 18; 25pp; Japanese.  
XX  
XX The invention relates to the determination of the smallest peptide  
XX fragment of insulin growth factor 1 (IGF-I) with the highest activity for  
XX use in ophthalmology and dermatology. The peptides are applicable in  
XX remedies in ophthalmology and dermatology for treating keratic injury and

CC promoting wound healing in the skin. The keratic injury is particularly  
 CC corneal ulcer, exfoliation of corneal epithelium, keratitis or dry eye.  
 CC The skin wound can be scratches, surgical cutting, skin ulcer, or burns.  
 CC This sequence represents one of the peptides of the invention with IGF-1  
 CC activity.  
 XX Sequence 4 AA;  
 SQ

Query Match 100.0%; Score 21; DB 7; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 DB 1 FGLM 4

RESULT 9  
 ADR43772  
 ID ADR43772 standard; peptide; 4 AA.  
 AC ADR43772;  
 DT 18-NOV-2004 (first entry)  
 XX Human magnesium binding defect (MgBD) peptide mimetic #2.  
 XX Magnesium binding defect; MgBD; MgBD binding defect peptide mimetic;  
 KW physiological disorder; preclampsia; pregnancy;  
 KW salt-sensitive essential hypertension; type 2 diabetes mellitus; human.  
 XX Homo sapiens.  
 OS

Key Location/Qualifiers  
 Modified-site 4  
 /label= OTHER  
 /note= "OTHER= C-terminal amide"  
 US2004171093-A1.  
 02-SEP-2004.  
 22-MAR-2004; 2004US-00805881.  
 10-MAR-1999; 99US-00265690.  
 09-AUG-2000; 2000US-00635266.  
 24-JAN-2002; 2002US-00053669.  
 29-AUG-2002; 2002US-00230133.  
 28-OCT-2003; 2003US-00695536.  
 (WELL/) WELLS I C.  
 Wells IC;  
 WPI; 2004-625105/60.  
 Assessing predisposition to physiological disorder associated with  
 magnesium binding defect in individual, by measuring level of amidated  
 peptides associated with magnesium binding defect in sample and comparing  
 peptide level to standard.  
 Claim 1; SEQ ID NO 2; 21pp; English.  
 The invention relates to a method of assessing a predisposition to a  
 physiological disorder associated with a magnesium binding defect in an  
 individual, involving measuring the level of amidated peptides associated  
 with the magnesium binding defect in a sample of body fluid of the  
 individual and comparing the level of peptide to a standard, where a  
 significantly lower level of the peptide is indicative of a  
 predisposition of the individual to the physiological disorder. The  
 invention also relates to a method of monitoring progress in treatment of  
 a physiological disorder associated with a magnesium binding defect in an  
 individual, involving comparing the level of peptide to the level of

CC peptide after treatment, where a significant increase in the level of the  
 CC peptide is indicative of the progress of treatment of the individual, a  
 CC monoclonal antibody that specifically binds to a peptide or its peptide  
 CC mimetic, a prognosis reagent for determining the presence of a magnesium  
 CC binding defect, generating a deficit of plasma membrane tightly bound  
 CC magnesium ion in mammalian somatic cells involving obtaining a sample of  
 CC body fluid comprising somatic cells, collecting the somatic cells from  
 CC the body fluid by centrifugation, resuspending the somatic cells in a  
 CC cell stabilising buffer, removing a sample of the suspended somatic  
 CC cells, measuring the level of tightly bound magnesium ion in the sample  
 CC of the somatic cells and repeating the removing and measuring steps at  
 CC subsequent times until the level of tightly bound magnesium is  
 CC significantly reduced and the somatic cells remain intact, a method of  
 CC identifying substances which promote binding of tightly bound magnesium  
 CC ion to a plasma membrane of mammalian somatic cells involving suspending  
 CC mammalian somatic cells having a deficit of plasma membrane tightly bound  
 CC magnesium in a physiological medium including magnesium ion, adding a  
 CC substance to be tested to the suspension and measuring the level of  
 CC tightly bound magnesium ion in the plasma membrane of the somatic cells  
 CC where a significant increase in the level of plasma membrane tightly  
 CC bound magnesium after addition of the substance to be tested is  
 CC indicative of promotion of binding by the substance, and a method for  
 CC ameliorating or correcting a magnesium binding defect in an individual  
 CC involving administering to the individual a substance which promotes  
 CC binding of tightly bound magnesium ion to the plasma membrane of  
 CC mammalian somatic cells. The methods are useful for assessing a  
 CC predisposition to a physiological disorder associated with a magnesium  
 CC binding defect in an individual, where the disorder is a predisposition  
 CC to preclampsia during pregnancy, salt-sensitive essential hypertension  
 CC or type 2 diabetes mellitus associated with the magnesium binding defect.  
 CC The method is also useful for ameliorating or correcting a magnesium  
 CC binding defect (MgBD) in an individual. This sequence represents a human  
 CC MgBD mimetic peptide of the invention.  
 XX Sequence 4 AA;

Query Match 100.0%; Score 21; DB 8; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 DB 1 FGLM 4

RESULT 10

AAP61654

ID AAP61654 standard; peptide; 4 AA.

XX AAP61654;

AC AAP61654;

XX 25-MAR-2003 (revised)

DT 03-OCT-2002 (revised)

DT 21-AUG-1991 (first entry)

XX Sequence of peptide which inhibits cyclic-nucleotide independent protein

DE kinase activity and mammalian cell growth.

XX Cell growth inhibitor; tumour cell growth inhibitor.

OS Synthetic.

XX Key

FT Misc-difference 1 Location/Qualifiers

FT /label= Carbobenzoxy-Phe

FT Misc-difference 4

XX /label= Leu-CH2Cl

XX US4582821-A.

XX 15-APR-1986.

XX 16-NOV-1983; 83US-00552255.

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XX PR 16-NOV-1983; 83US-00552255.
XX PA (DUPO ) DU PONT DE NEMOURS & CO E I.
XX PI Kettner CA, Racker E;
XX DR WPI; 1986-118872/18.
XX PT Inhibition of tumour cell growth - using peptide and aminoacid
XX FT halo:methyl ketone(s).
XX PS Claim 1; Col 4; 9pp; English.
XX CC The cpds. of the invention inhibit protein phosphorylation. The inventors
XX CC claim a process for inhibiting the growth of tumour cells in a medium
XX CC which comprises contacting the cells with a cpd. of formula (AAP61654-
XX CC P61661) or a physiologically acceptable salt. (Updated on 03-OCT-2002 to
XX CC add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
XX SQ Sequence 4 AA;

Query Match 85.7%; Score 18; DB 1; Length 4;
Best Local Similarity 75.0%; Pred. No. 1.8e+06;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
DB 1 FGLL 4

RESULT 11
AAP71301
ID: AAP71301 standard; peptide; 4 AA.
XX AC AAP71301;
XX DT 25-MAR-2003 (revised)
XX DT 15-MAY-1991 (first entry)
XX DE Peptide component of cpd. for treating picornavirus infections.
XX KW Picornaviridae; poliovirus; rhinovirus; antiviral agent.
XX OS Synthetic.
XX EN US4636492-A.
XX PD 13-JAN-1987.
XX PF 29-AUG-1984; 84US-00645426.
XX PR 29-AUG-1984; 84US-00645426.
XX PA (DUPO ) DU PONT DE NEMOURS & CO E I.
XX PI Kettner CA, Korant BD;
XX DR WPI; 1987-036897/05.
XX PT Treating picorna-virus infection with peptide halo:methyl ketone cpds. -
XX FT esp. for treating polio virus and rhino virus infections.
XX PS Disclosure; Page 3; 10pp; English.
XX CC This peptide is useful as part of a peptide/halo-methyl ketone cpd., for
XX CC treating picornavirus, egpolio- or rhinovirus infections. It inhibits the
XX CC processing of picornavirus capsid proteins by virus encoded proteases.
XX CC See AAP71302-13. See also US4652552. (Updated on 25-MAR-2003 to correct
XX CC PA field.)
XX SQ Sequence 4 AA;

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Query Match 85.7%; Score 18; DB 1; Length 4;
Best Local Similarity 75.0%; Pred. No. 1.8e+06;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
DB 1 FGLL 4

RESULT 12
AAW41686
ID: AAW41686 standard; peptide; 4 AA.
XX AC AAW41686;
XX DT 09-JUN-1998 (first entry)
XX DE Tetrapeptide #3.
XX KW Ophthalmic drug; corneal disorder; ulcer; epithelial peeling; dry eye;
XX KW keratitis; insulin like growth factor-I; IGF-I; eye drop.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT Modified-site 4
XX FT /note= "C-terminal amide"
XX PN WO9749419-A1.
XX PD 31-DEC-1997.
XX PF 11-JUN-1997; 97WO-JP002015.
XX PR 26-JUN-1996; 96JP-00165612.
XX PA (SANT ) SANTEN PHARM CO LTD.
XX PI Nishida T, Nakamura M, Nakata K;
XX DR WPI; 1998-076907/07.
XX PT Ophthalmic drug composition containing tetra:peptide - is useful as
XX FT corneal disorder remedy for corneal ulcer, corneal epithelial peeling,
XX FT dry eye, keratitis.
XX PS Disclosure; Page 11; 19pp; Japanese.
XX CC This sequence is shown in the specification. The invention relates to an
XX CC ophthalmic drug composition which contains Phe-Gly-Leu-Met-NH2 or its
XX CC medicinally acceptable salts as the active ingredient. It is used,
XX CC together with insulin like growth factor-I (IGF-I), to treat corneal
XX CC disorders such as corneal ulcer, corneal epithelial peeling, dry eye and
XX CC keratitis. The dosage is 0.1-5000 (preferably 1-1000) mg/day of the
XX CC active ingredient and 0.001-100 (preferably 0.01-10) mg/day of IGF-I. The
XX CC preferable form of the composition is eye drops
XX SQ Sequence 4 AA;

Query Match 85.7%; Score 18; DB 2; Length 4;
Best Local Similarity 75.0%; Pred. No. 1.8e+06;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
DB 1 YGLM 4

RESULT 13
ABB10092
ID: ABB10092 standard; peptide; 4 AA.
XX AC ABB10092;

```

XX 26-JUL-2002 (first entry)  
 XX Substance P analog used in wound healing treatment#15.  
 DE Wound healing; insulin-like growth factor-I; tear; abrasion; skin ulcer;  
 KW surgical incision; burn.  
 XX Unidentified.  
 OS WO200213853-A1.  
 PN 21-FEB-2002.  
 PD 10-AUG-2001; 2001WO-JP006933.  
 PF 10-AUG-2000; 2000JP-00242489.  
 PR 28-NOV-2000; 2000JP-00361388.  
 XX (SANT) SANTEN PHARM CO LTD.  
 PA (NISHU) NISHIDA T.  
 XX Nishida T, Nakata K, Nakamura M;  
 PI WPI; 2002-269153/31.  
 DR Skin wound healing promoters or skin epidermal extension promoters  
 XX containing substance P analogs and insulin-like growth factor-I for  
 PT treating wounds like tear, abrasion, surgical incision, skin ulcers or  
 PT burns.  
 XX Disclosure; Page 4; 20pp; Japanese.  
 PS The invention relates to skin wound healing promoters, containing  
 CC substance P analogs or their pharmaceutically-acceptable salts, and  
 CC insulin-like growth factor-I as the active ingredient. The promoters are  
 CC for treating wounds like tears, abrasions, surgical incisions, or skin  
 CC ulcers and burns. The current sequence represents a substance P analog  
 CC for use in wound healing treatment  
 XX Sequence 4 AA;  
 SQ

Query Match 85.7%; Score 18; DB 5; Length 4;  
 Best Local Similarity 75.0%; Pred. No. 1.8e+06;  
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 :|||  
 Db 1 YGLM 4

RESULT 14  
 AAP61707  
 ID AAP61707 standard; peptide; 4 AA.  
 XX AAP61707;  
 AC 25-MAR-2003 (revised)  
 DT 03-OCT-2002 (revised)  
 DT 08-JUN-1991 (first entry)  
 XX Sequence located immediately adjacent to and upstream of the cleavage  
 DE site within a virus-specified polypeptide precursor.  
 DE Viral disease; diagnosis; picornavirus.  
 KW Synthetic.  
 XX Key  
 XX Location/Qualifiers  
 FH Misc-difference 1  
 FT /note= "bonded to Boc, Z, Suc, or MeOSuc; Z=carbobenzoxyl;  
 FT Boc=t-Butyloxycarbonyl; Suc=Succinyl;  
 FT MeOSuc=Methoxysuccinyl"

Misc-difference 4  
 /note= "Bonded to a chromogenic, fluorogenic,  
 chemiluminescent, radioactive, antigenic, or haptenic  
 indicator group."

FT EP187721-A.  
 PN 16-JUL-1986.  
 PD 10-JAN-1986; 86EP-00300147.  
 XX 11-JAN-1985; 85US-00690731.  
 PR (DUPO) DU PONT DE NEMOURS & CO E I.  
 PA Kettner CA, Korant BD;  
 PI WPI; 1986-184617/29.  
 DR Peptide substrates for virus-specified protease(s) - with C-terminal  
 PT indicator gp. linked by amide or ester linkage.  
 XX Example; p22; 41pp; English.  
 XX The cpds. of the invention are useful in diagnosis of infectious diseases  
 CC caused by viruses which encode a specific protease e.g. picornaviruses.  
 CC (Updated on 03-OCT-2002 to add missing OS field.) (Updated on 25-MAR-2003  
 CC to correct PA field.)  
 XX Sequence 4 AA;  
 SQ

Query Match 76.2%; Score 16; DB 1; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGL 3  
 :|||  
 Db 1 FGL 3

RESULT 15  
 AAP71312  
 ID AAP71312 standard; protein; 4 AA.  
 XX AAP71312;  
 AC 25-MAR-2003 (revised)  
 DT 15-MAY-1991 (first entry)  
 XX Peptide component of cpd. for treating picornavirus infections.  
 DE Picornaviridae; poliovirus; rhinovirus; antiviral agent.  
 KW Synthetic.  
 OS US4636492-A.  
 PN 13-JAN-1987.  
 PD 29-AUG-1984; 84US-00645426.  
 PF 29-AUG-1984; 84US-00645426.  
 PR (DUPO) DU PONT DE NEMOURS & CO E I.  
 PA Kettner CA, Korant BD;  
 PI WPI; 1987-036897/05.  
 DR Treating picorna-virus infection with peptide halo:methyl ketone cpds. -  
 XX esp. for treating polio virus and rhino virus infections.  
 PS Disclosure; Page 4; 10pp; English.

XX This peptide is useful as part of a peptide/halo-methyl ketone cpd., for  
CC treating picornavirus, egpolio- or rhinovirus infections. It inhibits the  
CC processing of picornavirus capsid proteins by virus encoded proteases.  
CC See AAP71301-11 and AAP71313. See also US4652552. (Updated on 25-MAR-2003  
CC to correct PA field.)  
XX

SQ Sequence 4 AA;

Query Match 76.2%; Score 16; DB 1; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.8e+06;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FGL 3  
|||  
Db 1 FGL 3

Search completed: March 23, 2005, 15:12:55  
Job time : 167 secs



GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 23, 2005, 15:13:04 ; Search time 137 Seconds  
(without alignments)  
9.667 Million cell updates/sec

Title: SEQ3  
Perfect score: 21  
Sequence: 1 fglm 4

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1407402 seqs, 331100923 residues

Total number of hits satisfying chosen parameters: 9312

Minimum DB seq length: 0  
Maximum DB seq length: 4

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications AA.\*

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- 2: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep.\*
- 3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep.\*
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- 6: /cgn2\_6/ptodata/1/pubpaa/PCTUS\_PUBCOMB.pep.\*
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- 9: /cgn2\_6/ptodata/1/pubpaa/US09A\_PUBCOMB.pep.\*
- 10: /cgn2\_6/ptodata/1/pubpaa/US09B\_PUBCOMB.pep.\*
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- 19: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pep.\*
- 20: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	21	100.0	4	9 US-09-265-690C-2	Sequence 2, Appli
2	21	100.0	4	14 US-10-230-133-3	Sequence 3, Appli
3	21	100.0	4	14 US-10-053-669-2	Sequence 2, Appli
4	21	100.0	4	16 US-10-695-536-3	Sequence 3, Appli
5	21	100.0	4	16 US-10-805-881-2	Sequence 2, Appli
6	21	100.0	4	17 US-10-497-628-2	Sequence 2, Appli
7	16	76.2	4	9 US-09-879-442A-9	Sequence 9, Appli
8	16	76.2	4	17 US-10-821-240A-270	Sequence 270, App
9	15	71.4	3	14 US-10-230-133-2	Sequence 2, Appli
10	15	71.4	3	16 US-10-695-536-2	Sequence 2, Appli
11	14	66.7	4	9 US-09-879-442A-8	Sequence 8, Appli
12	14	66.7	4	15 US-10-137-867-328	Sequence 328, App
13	13	61.9	4	9 US-09-879-442A-98	Sequence 98, Appli

14	13	61.9	4	9 US-09-879-442A-99	Sequence 99, Appli
15	13	61.9	4	9 US-09-943-123-24	Sequence 24, Appli
16	13	61.9	4	14 US-10-087-905-30	Sequence 30, Appli
17	13	61.9	4	14 US-10-087-942-30	Sequence 10, Appli
18	13	61.9	4	14 US-10-087-402-10	Sequence 10, Appli
19	13	61.9	4	14 US-10-083-894-31	Sequence 31, Appli
20	13	61.9	4	14 US-10-196-394-98	Sequence 98, Appli
21	13	61.9	4	14 US-10-202-824-11	Sequence 11, Appli
22	13	61.9	4	15 US-10-359-363A-104	Sequence 104, App
23	13	61.9	4	17 US-10-712-359A-24	Sequence 24, Appli
24	12	57.1	3	14 US-10-121-857-6	Sequence 6, Appli
25	12	57.1	3	14 US-10-255-679-3	Sequence 3, Appli
26	12	57.1	3	14 US-10-208-018-6	Sequence 6, Appli
27	12	57.1	3	14 US-10-104-307-3	Sequence 3, Appli
28	12	57.1	4	8 US-08-484-409-14	Sequence 14, Appli
29	12	57.1	4	8 US-08-484-409-25	Sequence 25, Appli
30	12	57.1	4	9 US-09-804-733A-24	Sequence 24, Appli
31	12	57.1	4	9 US-09-803-126-20	Sequence 20, Appli
32	12	57.1	4	10 US-09-726-470A-29	Sequence 29, Appli
33	12	57.1	4	10 US-09-563-222-1	Sequence 1, Appli
34	12	57.1	4	10 US-09-811-945-15	Sequence 15, Appli
35	12	57.1	4	13 US-10-007-761-62	Sequence 62, Appli
36	12	57.1	4	13 US-10-044-034-1	Sequence 1, Appli
37	12	57.1	4	13 US-10-044-034-25	Sequence 25, Appli
38	12	57.1	4	13 US-10-076-421-3	Sequence 3, Appli
39	12	57.1	4	14 US-10-087-905-14	Sequence 14, Appli
40	12	57.1	4	14 US-10-087-905-17	Sequence 17, Appli
41	12	57.1	4	14 US-10-255-679-2	Sequence 2, Appli
42	12	57.1	4	14 US-10-255-679-5	Sequence 5, Appli
43	12	57.1	4	14 US-10-255-679-11	Sequence 11, Appli
44	12	57.1	4	14 US-10-255-679-12	Sequence 12, Appli
45	12	57.1	4	14 US-10-255-679-13	Sequence 13, Appli

ALIGNMENTS

RESULT 1  
US-09-265-690C-2  
; Sequence 2, Application US/09265690C  
; Publication No. US20010051345A1  
; GENERAL INFORMATION:  
; APPLICANT: Wells, Ibert  
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Ma  
; FILE OF INVENTION: For Disease Diagnosis  
; FILE REFERENCE: 1427001  
; CURRENT APPLICATION NUMBER: US/09/265,690C  
; CURRENT FILING DATE: 1999-03-10  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD\_RES  
; LOCATION: (4)..(4)  
; OTHER INFORMATION: AMIDATION  
US-09-265-690C-2

Query Match 100.0%; Score 21; DB 9; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
Db 1 FGLM 4

RESULT 2  
US-10-230-133-3  
; Sequence 3, Application US/10230133  
; Publication No. US20030040625A1

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; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and
; FILE REFERENCE: 2892-106
; CURRENT APPLICATION NUMBER: US/10/230,133
; PRIOR FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: 09/635,266
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-230-133-3

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Query Match          100.0%; Score 21; DB 14; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
Db 1 FGLM 4

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RESULT 3
US-10-053-669-2
; Sequence 2, Application US/10053669
; Publication No. US20030077658A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Ma
; FILE REFERENCE: N1427-005
; CURRENT APPLICATION NUMBER: US/10/053,669
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: 09/265,690
; PRIOR FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-053-669-2

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Query Match          100.0%; Score 21; DB 14; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
Db 1 FGLM 4

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RESULT 4
US-10-695-536-3
; Sequence 3, Application US/10695536
; Publication No. US20040110692A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert Clifton
; TITLE OF INVENTION: Antagonists of the Magnesium Binding Defect as Therapeutic Agents
; FILE REFERENCE: 800812-0008

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; CURRENT APPLICATION NUMBER: US/10/695,536
; CURRENT FILING DATE: 2003-10-28
; PRIOR APPLICATION NUMBER: US 10/230,133
; PRIOR FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: US 09/635,266
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-695-536-3

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Query Match          100.0%; Score 21; DB 16; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
Db 1 FGLM 4

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RESULT 5
US-10-805-881-2
; Sequence 2, Application US/10805881
; Publication No. US20040171093A1
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert C.
; TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound
; FILE REFERENCE: 800812-0005
; CURRENT APPLICATION NUMBER: US/10/805,881
; CURRENT FILING DATE: 2004-03-22
; PRIOR APPLICATION NUMBER: US 10/053,669
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: US 10/695,536
; PRIOR FILING DATE: 2003-10-28
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: AMIDATION
US-10-805-881-2

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Query Match          100.0%; Score 21; DB 16; Length 4;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4
Db 1 FGLM 4

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RESULT 6
US-10-497-628-2
; Sequence 2, Application US/10497628
; Publication No. US20050009752A1
; GENERAL INFORMATION:
; APPLICANT: Teruo Nishida
; APPLICANT: Makoto Inui
; APPLICANT: Masatsugu Nakamura
; TITLE OF INVENTION: NOVEL PEPTIDE AND PHARMACEUTICAL USE OF THE SAME
; FILE REFERENCE: 04355/HG

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; CURRENT APPLICATION NUMBER: US/10/497,628  
; CURRENT FILING DATE: 2004-06-03  
; PRIOR APPLICATION NUMBER: JP 2001-368103  
; PRIOR FILING DATE: 2001-12-01  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Human  
US-10-497-628-2

Query Match 100.0%; Score 21; DB 17; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FGLM 4  
|||  
Db 1 FGLM 4

## RESULT 7

US-09-879-442A-9  
; Sequence 9, Application US/09879442A  
; Patent No. US20020142955A1  
; GENERAL INFORMATION:

; APPLICANT: CORIXA CORPORATION  
; APPLICANT: Dubois, Vincent  
; APPLICANT: Fernandez, Anne Marie  
; APPLICANT: Gangwar, Sanjeev  
; APPLICANT: Lewis, Evan  
; APPLICANT: Lobl, Thomas J.  
; APPLICANT: Nieder, Matthew H.  
; APPLICANT: Pickford, Lesley B.  
; APPLICANT: Trounet, Andre  
; APPLICANT: Varranton, Geoffrey T.  
; TITLE OF INVENTION: ENZYME CLEAVABLE PRODRUG COMPOUNDS  
; FILE REFERENCE: COUL-015/02US  
; CURRENT APPLICATION NUMBER: US/09/879,442A  
; CURRENT FILING DATE: 2001-06-11  
; PRIOR APPLICATION NUMBER: 60/290,448  
; PRIOR FILING DATE: 2001-05-11  
; PRIOR APPLICATION NUMBER: 60/211,887  
; PRIOR FILING DATE: 2000-06-14  
; PRIOR APPLICATION NUMBER: PCT/US99/30393  
; PRIOR FILING DATE: 1999-12-10  
; PRIOR APPLICATION NUMBER: 60/119,312  
; PRIOR FILING DATE: 1999-02-08  
; PRIOR APPLICATION NUMBER: 60/111,793  
; PRIOR FILING DATE: 1998-12-11  
; NUMBER OF SEQ ID NOS: 103  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 9  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; NAME/KEY: SITE  
; LOCATION: (1)  
; OTHER INFORMATION: Beta-Alanine  
US-09-879-442A-9

Query Match 76.2%; Score 16; DB 9; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FGL 3  
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Db 2 FGL 4

## RESULT 8

US-09-879-442A-9

## US-10-821-240A-270

; Sequence 270, Application US/10821240A  
; Publication No. US20050037430A1  
; GENERAL INFORMATION:  
; APPLICANT: Khan, Nisar A.  
; APPLICANT: Benner, Robert  
; TITLE OF INVENTION: Gene regulator  
; FILE REFERENCE: 2183-5223US  
; CURRENT APPLICATION NUMBER: US/10/821,240A  
; CURRENT FILING DATE: 2004-04-08  
; PRIOR APPLICATION NUMBER: 10/028,075  
; PRIOR FILING DATE: 2001-12-21  
; PRIOR APPLICATION NUMBER: EP 01203748.7  
; PRIOR FILING DATE: 2001-10-04  
; NUMBER OF SEQ ID NOS: 312  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 270  
; LENGTH: 4  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: derivative peptide based on m  
; OTHER INFORMATION: metalloproteinase-2  
US-10-821-240A-270

Query Match 76.2%; Score 16; DB 17; Length 4;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FGL 3  
|||  
Db 2 FGL 4

## RESULT 9

US-10-230-133-2  
; Sequence 2, Application US/10230133  
; Publication No. US20030040625A1  
; GENERAL INFORMATION:  
; APPLICANT: Wells, Ibert  
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and  
; FILE REFERENCE: 2892-106  
; CURRENT APPLICATION NUMBER: US/10/230,133  
; CURRENT FILING DATE: 2002-08-29  
; PRIOR APPLICATION NUMBER: 09/635,266  
; PRIOR FILING DATE: 2000-08-09  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2  
; LENGTH: 3  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD.RES  
; LOCATION: (3)..(3)  
; OTHER INFORMATION: AMIDATION  
US-10-230-133-2

Query Match 71.4%; Score 15; DB 14; Length 3;  
Best Local Similarity 100.0%; Pred. No. 1.3e+06;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GLM 4  
|||  
Db 1 GLM 3

## RESULT 10

US-10-695-536-2  
; Sequence 2, Application US/10695536  
; Publication No. US20040110692A1  
; GENERAL INFORMATION:

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; APPLICANT: Wells, Ibert Clifton
; TITLE OF INVENTION: Antagonists of the Magnesium Binding Defect as Therapeutic Agents
; FILE REFERENCE: 800812-0008
; CURRENT APPLICATION NUMBER: US/10/695,536
; PRIOR FILING DATE: 2003-10-28
; PRIOR APPLICATION NUMBER: US 10/230,133
; PRIOR FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: US 09/635,266
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 3
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (3)-(3)
; OTHER INFORMATION: AMIDATION
US-10-695-536-2

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Query Match      71.4%; Score 15; DB 16; Length 3;
Best Local Similarity 100.0%; Pred. No. 1.3e+06;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      2 GLM 4
Db      1 GLM 3

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RESULT 11
US-09-879-442A-8
; Sequence 8, Application US/09879442A
; Patent No. US20020142955A1
; GENERAL INFORMATION:
; APPLICANT: CORIXA CORPORATION
; APPLICANT: Dubois, Vincent
; APPLICANT: Fernandez, Anne Marie
; APPLICANT: Gangwar, Sanjeev
; APPLICANT: Lewis, Evan
; APPLICANT: Lobl, Thomas J.
; APPLICANT: Nieder, Matthew H.
; APPLICANT: Pickford, Lesley B.
; APPLICANT: Trouet, Andre
; APPLICANT: Yarranton, Geoffrey T.
; TITLE OF INVENTION: ENZYME CLEAVABLE PRODRUG COMPOUNDS
; FILE REFERENCE: COUL-015/02US
; CURRENT APPLICATION NUMBER: US/09/879,442A
; CURRENT FILING DATE: 2001-06-11
; PRIOR APPLICATION NUMBER: 60/290,448
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/211,887
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: PCT/US99/30393
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: 60/119,312
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 60/111,793
; PRIOR FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 103
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 8
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Beta-Alanine
US-09-879-442A-8

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Query Match      66.7%; Score 14; DB 9; Length 4;
Best Local Similarity 66.7%; Pred. No. 1.3e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 FGL 3
Db      2 FGI 4

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RESULT 12
US-10-137-867-328
; Sequence 328, Application US/10137867
; Publication No. US20030207349A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: F3330R1C146
; CURRENT APPLICATION NUMBER: US/10/137,867
; CURRENT FILING DATE: 2002-05-03
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 328
; LENGTH: 379
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-137-867-328

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Query Match      66.7%; Score 14; DB 15; Length 4;
Best Local Similarity 66.7%; Pred. No. 1.3e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 FGL 3
Db      2 FGM 4

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RESULT 13
US-09-879-442A-98
; Sequence 98, Application US/09879442A
; Patent No. US20020142955A1
; GENERAL INFORMATION:
; APPLICANT: CORIXA CORPORATION
; APPLICANT: Dubois, Vincent
; APPLICANT: Fernandez, Anne Marie
; APPLICANT: Gangwar, Sanjeev
; APPLICANT: Lewis, Evan
; APPLICANT: Lobl, Thomas J.
; APPLICANT: Nieder, Matthew H.
; APPLICANT: Pickford, Lesley B.
; APPLICANT: Trouet, Andre
; APPLICANT: Yarranton, Geoffrey T.
; TITLE OF INVENTION: ENZYME CLEAVABLE PRODRUG COMPOUNDS
; FILE REFERENCE: COUL-015/02US
; CURRENT APPLICATION NUMBER: US/09/879,442A
; CURRENT FILING DATE: 2001-06-11
; PRIOR APPLICATION NUMBER: 60/290,448

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; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/211,887
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: PCT/US99/30393
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: 60/119,312
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 60/111,793
; PRIOR FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 103
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 98
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: 2-Thienylalanine
;
US-09-879-442A-98

Query Match          61.9%; Score 13; DB 9; Length 4;
Best Local Similarity 66.7%; Pred. No. 1.3e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 FGL 3
      :||
Db      2 YGL 4

RESULT 14
US-09-879-442A-99
; Sequence 99, Application US/09879442A
; Patent No. US20020142955A1
; GENERAL INFORMATION:
; APPLICANT: CORIXA CORPORATION
; APPLICANT: Dubois, Vincent
; APPLICANT: Fernandez, Anne Marie
; APPLICANT: Gangwar, Sanjeev
; APPLICANT: Lewis, Evan
; APPLICANT: Lobi, Thomas J.
; APPLICANT: Nieder, Matthew H.
; APPLICANT: Pickford, Lesley B.
; APPLICANT: Trounet, Andre
; APPLICANT: Yarranton, Geoffrey T.
; TITLE OF INVENTION: ENZYME CLEAVABLE PRODRUG COMPOUNDS
; FILE REFERENCE: COUL-015/02US
; CURRENT APPLICATION NUMBER: US/09/879,442A
; CURRENT FILING DATE: 2001-06-11
; PRIOR APPLICATION NUMBER: 60/290,448
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/211,887
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: PCT/US99/30393
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: 60/119,312
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 60/111,793
; PRIOR FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 103
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 99
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Beta-Alanine
;
US-09-879-442A-99

Query Match          61.9%; Score 13; DB 9; Length 4;
Best Local Similarity 66.7%; Pred. No. 1.3e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 FGL 3
      :||
Db      2 YGL 4

RESULT 15
US-09-943-123-24
; Sequence 24, Application US/09943123
; Publication No. US20020182701A1
; GENERAL INFORMATION:
; APPLICANT: CHANG, Y-H
; APPLICANT: VETRO, J.A.
; APPLICANT: MICKA, W.S.
; TITLE OF INVENTION: Dominant Negative Variants of Methionine Aminopeptidase
; TITLE OF INVENTION: 2 ("MetAP2") and Clinical Uses Therefor
; FILE REFERENCE: 16153-8007
; CURRENT APPLICATION NUMBER: US/09/943,123
; CURRENT FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 24
; LENGTH: 4
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: peptide
;
US-09-943-123-24

Query Match          61.9%; Score 13; DB 9; Length 4;
Best Local Similarity 66.7%; Pred. No. 1.3e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 GLM 4
      :|:|
Db      2 GMM 4

Search completed: March 23, 2005, 15:25:39
Job time : 138 secs
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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 23, 2005, 15:04:03 ; Search time 41 Seconds  
(without alignments)  
7.283 Million cell updates/sec

Title: SEQ3  
Perfect score: 21  
Sequence: 1 fglm 4

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 12390

Minimum DB seq length: 0  
Maximum DB seq length: 4

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA\*  
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3: /cgn2\_6/ptodata/1/iaa/6A COMB.pap:\*  
4: /cgn2\_6/ptodata/1/iaa/6B COMB.pap:\*  
5: /cgn2\_6/ptodata/1/iaa/PCTUS COMB.pap:\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	21	100.0	4	1	US-08-441-591-63
2	21	100.0	4	1	US-08-303-362A-63
3	21	100.0	4	3	US-09-265-690C-2
4	21	100.0	4	4	US-09-635-266-3
5	21	100.0	4	4	US-10-230-133-3
6	21	100.0	4	5	PCT-US95-05600-80
7	16	76.2	4	2	US-08-747-137-124
8	16	76.2	4	3	US-08-722-126A-20
9	15	71.4	3	4	US-09-635-266-2
10	15	71.4	3	4	US-10-230-133-2
11	15	71.4	4	2	US-08-070-301-8
12	15	71.4	4	2	US-08-433-401-4
13	14	66.7	4	3	US-08-793-701-25
14	14	66.7	4	4	US-09-579-264-25
15	13	61.9	4	2	US-08-423-964-37
16	13	61.9	4	3	US-08-812-586-60
17	13	61.9	4	4	US-09-535-832A-56
18	13	61.9	4	4	US-09-665-362A-31
19	13	61.9	4	4	US-09-665-637-31
20	13	61.9	4	4	US-10-087-402-10
21	13	61.9	4	4	PCT-US93-08062-37
22	13	61.9	4	5	US-08-343-943-4
23	12	57.1	3	1	US-09-060-455-2
24	12	57.1	3	2	US-09-150-621-3
25	12	57.1	3	4	US-10-121-857-6
26	12	57.1	4	1	US-07-657-769B-58
27	12	57.1	4	1	US-08-485-886-108

28 12 57.1 4 1 US-07-822-924-3 Sequence 3, Appli  
29 12 57.1 4 1 US-07-822-924-5 Sequence 5, Appli  
30 12 57.1 4 1 US-07-822-924-7 Sequence 7, Appli  
31 12 57.1 4 1 US-08-285-777-1 Sequence 1, Appli  
32 12 57.1 4 1 US-08-147-270A-1 Sequence 1, Appli  
33 12 57.1 4 1 US-07-969-307A-1 Sequence 1, Appli  
34 12 57.1 4 1 US-07-969-307A-2 Sequence 2, Appli  
35 12 57.1 4 1 US-07-969-307A-3 Sequence 3, Appli  
36 12 57.1 4 1 US-08-127-904-11 Sequence 11, Appli  
37 12 57.1 4 1 US-08-431-539-4 Sequence 4, Appli  
38 12 57.1 4 1 US-08-331-383-10 Sequence 10, Appli  
39 12 57.1 4 1 US-08-429-732-20 Sequence 20, Appli  
40 12 57.1 4 1 US-07-789-184-108 Sequence 108, App  
41 12 57.1 4 1 US-08-549-008-10 Sequence 10, Appli  
42 12 57.1 4 1 US-08-624-123-11 Sequence 11, Appli  
43 12 57.1 4 1 US-08-077-252B-20 Sequence 20, Appli  
44 12 57.1 4 1 US-08-475-263-108 Sequence 108, App  
45 12 57.1 4 1 US-08-485-886-108 Sequence 108, App

## ALIGNMENTS

RESULT 1  
US-08-441-591-63  
; Sequence 63, Application US/08441591  
; Patent No. 5637682  
; GENERAL INFORMATION:  
; APPLICANT: NIEUWLANDT, D., GOLD, L. AND WECKER, M.  
; TITLE OF INVENTION: HIGH-AFFINITY  
; TITLE OF INVENTION: OLIGONUCLEOTIDE LIGANDS  
; TITLE OF INVENTION: TO THE TACHYKININ  
; TITLE OF INVENTION: SUBSTANCE P  
; NUMBER OF SEQUENCES: 66  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Swanson & Bratschun, L.L.C.  
; STREET: 8400 E. Prentice Avenue, Suite 200  
; CITY: Englewood  
; STATE: Colorado  
; COUNTRY: USA  
; ZIP: 80111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MG storage  
; COMPUTER: IBM compatible  
; OPERATING SYSTEM: MS-DOS  
; SOFTWARE: WordPerfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/441,591  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/303,362  
; FILING DATE: 9-SEPTEMBER-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/714,131  
; FILING DATE: 10-JUNE-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/931,473  
; FILING DATE: 17-AUGUST-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/117,991  
; FILING DATE: 8-SEPTEMBER 1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/536,428  
; FILING DATE: 11-JUNE-1990  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/964,624  
; FILING DATE: 21-OCTOBER-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Barry J. Swanson  
; REGISTRATION NUMBER: 33,215  
; REFERENCE/DOCKET NUMBER: NEX21/C  
; TELECOMMUNICATION INFORMATION:

TELEPHONE: (303) 793-3333  
 TELEFAX: (303) 793-3433  
 INFORMATION FOR SEQ ID NO: 63:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 4  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 US-08-441-591-63

Query Match 100.0%; Score 21; DB 1; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 Db 1 FGLM 4

## RESULT 2

US-08-303-362A-63  
 ; Sequence 63, Application US/08303362A  
 ; Patent No. 5648214  
 ; GENERAL INFORMATION:

APPLICANT: NIEUWLANDT, D., GOLD, L. AND WECKER, M.  
 TITLE OF INVENTION: HIGH-AFFINITY  
 TITLE OF INVENTION: OLIGONUCLEOTIDE LIGANDS  
 TITLE OF INVENTION: TO THE TACHYKININ  
 TITLE OF INVENTION: SUBSTANCE P  
 NUMBER OF SEQUENCES: 66  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Swanson & Bratschun, L.L.C.  
 STREET: 8400 E. Prentice Avenue, Suite 200  
 CITY: Englewood  
 STATE: Colorado  
 COUNTRY: USA  
 ZIP: 80111

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MG storage  
 COMPUTER: IBM compatible  
 OPERATING SYSTEM: MS-DOS  
 SOFTWARE: WordPerfect 5.1  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/303,362A  
 FILING DATE: 9-SEPTEMBER-1994  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 07/714,131  
 FILING DATE: 10-JUNE-1991

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 07/931,473  
 FILING DATE: 17-AUGUST-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/117,991  
 FILING DATE: 8-SEPTEMBER 1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 07/536,428  
 FILING DATE: 11-JUNE-1990  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 07/964,624  
 FILING DATE: 21-OCTOBER-1992  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Barry J. Swanson  
 REGISTRATION NUMBER: 33,215  
 REFERENCE/DOCKET NUMBER: NEX21  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (303) 793-3333  
 TELEFAX: (303) 793-3433  
 INFORMATION FOR SEQ ID NO: 63:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 4  
 TYPE: amino acid  
 STRANDEDNESS: single

TOPOLOGY: linear  
 US-08-303-362A-63

Query Match 100.0%; Score 21; DB 1; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 Db 1 FGLM 4

## RESULT 3

US-09-265-690C-2  
 ; Sequence 2, Application US/09265690C  
 ; Patent No. 6372440  
 ; GENERAL INFORMATION:

APPLICANT: Wells, Ibert  
 TITLE OF INVENTION: Method for Detecting Deficient Cellular Membrane Tightly Bound Mac  
 TITLE OF INVENTION: for Disease Diagnosis  
 FILE REFERENCE: 1427001  
 CURRENT APPLICATION NUMBER: US/09/265,690C  
 CURRENT FILING DATE: 1999-03-10  
 NUMBER OF SEQ ID NOS: 4  
 SOFTWARE: PatentIn version 3.0  
 SEQ ID NO 2  
 LENGTH: 4  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: MOD RES  
 LOCATION: (4)-(4)  
 OTHER INFORMATION: AMIDATION  
 US-09-265-690C-2

Query Match 100.0%; Score 21; DB 3; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 Db 1 FGLM 4

## RESULT 4

US-09-635-266-3  
 ; Sequence 3, Application US/09635266  
 ; Patent No. 6455734  
 ; GENERAL INFORMATION:

APPLICANT: Wells, Ibert  
 TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and  
 TITLE OF INVENTION: methods for treatment of abnormal physiological states  
 FILE REFERENCE: N1427-002  
 CURRENT APPLICATION NUMBER: US/09/635,266  
 CURRENT FILING DATE: 2000-08-09  
 NUMBER OF SEQ ID NOS: 4  
 SOFTWARE: PatentIn version 3.0  
 SEQ ID NO 3  
 LENGTH: 4  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: MOD\_RES  
 LOCATION: (4)-(4)  
 OTHER INFORMATION: AMIDATION  
 US-09-635-266-3

Query Match 100.0%; Score 21; DB 4; Length 4;  
 Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 Db 1 FGLM 4



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PCT-US95-05600-80
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 08/248,632
  FILING DATE: 24-MAY-1994
CLASSIFICATION:
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 08/303,362
  FILING DATE: 09-SEPTEMBER-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 08/361,795
  FILING DATE: 21-DECEMBER-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 08/117,991
  FILING DATE: 08-SEPTEMBER-1993
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 07/931,473
  FILING DATE: 17-AUGUST-1992
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 07/964,624
  FILING DATE: 21-OCTOBER-1992
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 07/536,428
  FILING DATE: 11-JUNE-1990
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 07/714,131
  FILING DATE: 10-JUNE-1991
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: 07/536,428
  FILING DATE: 11-JUNE-1990
ATTORNEY/AGENT INFORMATION:
  NAME: Barry J. Swanson
  REGISTRATION NUMBER: 33,215
  REFERENCE/DOCKET NUMBER: NEX17/PCT
  TELECOMMUNICATION INFORMATION:
    TELEPHONE: (303) 793-3333
    TELEFAX: (303) 793-3433
  INFORMATION FOR SEQ ID NO: 80:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 4 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
Query Match          100.0%; Score 21; DB 5; Length 4;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches              4; Conservative 0; Mismatches 0; Indels 0
QY                   1 FGLM 4
DB                   1 FGLM 4
|||||
RESULT 7
US-08-747-137-124
Sequence 124, Application US/08747137
Patent No. 5945033
GENERAL INFORMATION:
APPLICANT: YEN, Richard C.K.
TITLE OF INVENTION: NON-CROSSLINKED PROTEIN PARTICLES FOR
THERAPEUTIC AND DIAGNOSTIC USE
NUMBER OF SEQUENCES: 184
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Crew LLP
STREET: Two Embarcadero Center, 8th Floor
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/747,137
; FILING DATE: 12-NOV-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/212,546
; FILING DATE: 14-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/069,831
; FILING DATE: 01-JUN-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/959,560
; FILING DATE: 13-OCT-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/641,720
; FILING DATE: 15-JAN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 016197-000840US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; INFORMATION FOR SEQ ID NO: 124:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: not relevant
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 4
; OTHER INFORMATION: /product= "Met-Amide"
; US-08-747-137-124

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```

Query Match          76.2%; Score 16; DB 2; Length 4;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 FGL 3
Db 1 FGL 3

```

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RESULT 8
US-08-722-126A-20
; Sequence 20, Application US/08722126A
; Patent No. 6034227
; GENERAL INFORMATION:
; APPLICANT: PECHT, Israel
; APPLICANT: GUTHMANN, Marcelo D.
; APPLICANT: TAL, Michael
; TITLE OF INVENTION: A DNA MOLECULE ENCODING A MAST CELL
; NUMBER OF INVENTION: FUNCTION-ASSOCIATED ANTIGEN (MAFA)
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.
; STREET: 419 Seventh Street N.W., Ste. 300
; CITY: Washington
; STATE: D.C.
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/722,126A
; FILING DATE: 08-OCT-1996
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/04258
; FILING DATE: 06-APR-1995

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: IL 109257
; FILING DATE: 08-APR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: BROWDY, Roger L.
; REGISTRATION NUMBER: 25,618
; REFERENCE/DOCKET NUMBER: PECHT-1A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 628-5197
; TELEFAX: (202) 737-3528
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-722-126A-20

```

```

Query Match          76.2%; Score 16; DB 3; Length 4;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 FGL 3
Db 2 FGL 4

```

```

RESULT 9
US-09-635-266-2
; Sequence 2, Application US/09635266
; Patent No. 6455734
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and
; FILE OF INVENTION: methods for treatment of abnormal physiological states
; FILE REFERENCE: N1427-002
; CURRENT APPLICATION NUMBER: US/09/635,266
; CURRENT FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 2
; LENGTH: 3
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD RES
; LOCATION: (3)-(3)
; OTHER INFORMATION: AMIDATION
; US-09-635-266-2

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```

Query Match          71.4%; Score 15; DB 4; Length 3;
Best Local Similarity 100.0%; Pred. No. 4.1e+05;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 2 GLM 4
Db 1 GLM 3

```

```

RESULT 10
US-10-230-133-2
; Sequence 2, Application US/10230133
; Patent No. 6664420
; GENERAL INFORMATION:
; APPLICANT: Wells, Ibert
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and
; FILE OF INVENTION: methods for treatment of abnormal physiological states
; FILE REFERENCE: 2892-106
; CURRENT APPLICATION NUMBER: US/10/230,133
; CURRENT FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: 09/635,266
; PRIOR FILING DATE: 2000-08-09

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NUMBER OF SEQ ID NOS: 4  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 2  
LENGTH: 3  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: MOD RES  
LOCATION: (3)..(3)  
OTHER INFORMATION: AMIDATION  
US-10-230-133-2

Query Match 71.4%; Score 15; DB 4; Length 3;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GLM 4  
|||  
Db 1 GLM 3

RESULT 11  
US-08-070-301-8  
Sequence 8, Application US/08070301  
Patent No. 5871995  
GENERAL INFORMATION:  
APPLICANT: IIDA, Toshio  
APPLICANT: KAMINUMA, Toshihiko  
APPLICANT: FUSE, Yuka  
APPLICANT: TAJIMA, Masahiro  
APPLICANT: YANAGI, Mitsuo  
APPLICANT: OKAMOTO, Hiroshi  
APPLICANT: KISHIMOTO, Jiro  
APPLICANT: IFUKU, Ohji  
APPLICANT: KATO, Ichiro  
TITLE OF INVENTION: ENZYME PARTICIPATING IN C-TERMINAL  
TITLE OF INVENTION: AMIDATION, AND METHOD OF PREPARING SAME AND USE THEREOF  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Wegner, Cantor, Mueller & Player, P.C.  
STREET: 1233 20th Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.A.  
ZIP: 20036-8218  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/070,301  
FILING DATE: 24-MAY-1991  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 1-209687  
FILING DATE: 15-AUG-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 1-181933  
FILING DATE: 31-OCT-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 2-76331  
FILING DATE: 26-MAR-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 2-106412  
FILING DATE: 24-APR-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 2-205475  
FILING DATE: 02-AUG-1990  
ATTORNEY/AGENT INFORMATION:  
NAME: Player, William E.  
REGISTRATION NUMBER: 31,409  
REFERENCE/DOCKET NUMBER: P-450-22830

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 887-040  
TELEFAX: (202) 835-0605  
TELEX: 440706  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-070-301-8

Query Match 71.4%; Score 15; DB 2; Length 4;  
Best Local Similarity 100.0%; Pred. No. 4.1e+05;  
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GLM 4  
|||  
Db 1 GLM 3

RESULT 12  
US-08-433-401-4  
Sequence 4, Application US/08433401  
Patent No. 5872057  
GENERAL INFORMATION:  
APPLICANT: Fh lenhag, Karin I.  
APPLICANT: Fryklund, Linda  
APPLICANT: Larsson, Bo C.  
APPLICANT: Nyberg, Fred J.  
APPLICANT: Westin-Sj dahl, Gertrud E.  
APPLICANT: Ludin, Ronny  
TITLE OF INVENTION: New Oligopeptides with Affinity to  
TITLE OF INVENTION: Opioid Receptors  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pollock, Vande Sande & Priddy  
STREET: 1990 M Street, N.W., Suite 800  
CITY: Washington  
STATE: D.C.  
COUNTRY: US  
ZIP: 20036-0088  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/433,401  
FILING DATE: 18-MAY-1995  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/SE93/00986  
FILING DATE: 18-NOV-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: SE 9203496-6  
FILING DATE: 20-NOV-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Amernick, Burton A.  
REGISTRATION NUMBER: 24,852  
REFERENCE/DOCKET NUMBER: 151/00118  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 331-7111  
TELEFAX: (202) 223-2596  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-433-401-4

Query Match 71.4%; Score 15; DB 2; Length 4;  
 Best Local Similarity 50.0%; Pred. No. 4.1e+05;  
 Matches 2; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGLM 4  
 :||:  
 Db 1 YGLL 4

## RESULT 13

US-08-793-701-25  
 ; Sequence 25, Application US/08793701  
 ; Patent No. 6248581  
 ; GENERAL INFORMATION:  
 ; APPLICANT: GICQUEL, Brigitte  
 ; APPLICANT: LIM, Eng Mong  
 ; APPLICANT: PORTNOI, Denis  
 ; APPLICANT: BERTHET, Francois-Xavier  
 ; APPLICANT: TIMM, Juliano  
 ; TITLE OF INVENTION: MYCOBACTERIA FUNCTIONAL SCREENING AND/OR  
 ; NUMBER OF SEQUENCES: 63  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: C/O FINNEGAN, HENDERSON, FARRABOW, GARRETT &  
 ; STREET: 1300 I Street, N.W.  
 ; CITY: Washington  
 ; STATE: D.C.  
 ; COUNTRY: USA  
 ; ZIP: 20005  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/793,701  
 ; FILING DATE: 09-JUN-1997  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: PCT/FR9501133  
 ; FILING DATE: 30-AUG-1995  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: FR 94/10585  
 ; FILING DATE: 02-SEP-1994  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Mcdonnell, Leslie A.  
 ; REGISTRATION NUMBER: 34,872  
 ; REFERENCE/DOCKET NUMBER: 02356.0075  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (202) 408-4132  
 ; TELEFAX: (202) 408-4400  
 ; INFORMATION FOR SEQ ID NO: 25:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 4 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-08-793-701-25

Query Match 66.7%; Score 14; DB 3; Length 4;  
 Best Local Similarity 66.7%; Pred. No. 4.1e+05;  
 Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGL 3  
 :||:  
 Db 2 FGI 4

## RESULT 14

US-09-579-264-25  
 ; Sequence 25, Application US/09579264

Patent No. 6565855  
 ; GENERAL INFORMATION:  
 ; APPLICANT: GICQUEL, Brigitte  
 ; APPLICANT: LIM, Eng Mong  
 ; APPLICANT: PORTNOI, Denis  
 ; APPLICANT: BERTHET, Francois-Xavier  
 ; APPLICANT: TIMM, Juliano  
 ; TITLE OF INVENTION: MYCOBACTERIA FUNCTIONAL SCREENING AND/OR  
 ; NUMBER OF SEQUENCES: 63  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: C/O FINNEGAN, HENDERSON, FARRABOW, GARRETT &  
 ; STREET: 1300 I Street, N.W.  
 ; CITY: Washington  
 ; STATE: D.C.  
 ; COUNTRY: USA  
 ; ZIP: 20005  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/09/579,264  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 08/793,701  
 ; FILING DATE:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: FR 94/10585  
 ; FILING DATE: 02-SEP-1994  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Mcdonnell, Leslie A.  
 ; REGISTRATION NUMBER: 34,872  
 ; REFERENCE/DOCKET NUMBER: 02356.0075  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (202) 408-4132  
 ; TELEFAX: (202) 408-4400  
 ; INFORMATION FOR SEQ ID NO: 25:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 4 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-09-579-264-25

Query Match 66.7%; Score 14; DB 4; Length 4;  
 Best Local Similarity 66.7%; Pred. No. 4.1e+05;  
 Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FGL 3  
 :||:  
 Db 2 FGI 4

## RESULT 15

US-08-429-964-37  
 ; Sequence 37, Application US/08429964  
 ; Patent No. 5962243  
 ; GENERAL INFORMATION:  
 ; APPLICANT: BROWN, MICHAEL S.  
 ; APPLICANT: GOLDSTEIN, JOSEPH L.  
 ; APPLICANT: REISS, YUVAL  
 ; APPLICANT: JAMES, GUY L.  
 ; TITLE OF INVENTION: METHODS FOR THE IDENTIFICATION OF FARNESYL  
 ; TRANSFERASE INHIBITORS  
 ; NUMBER OF SEQUENCES: 85  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: ARNOLD, WHITE & DURKEE  
 ; STREET: P.O. BOX 4433  
 ; CITY: HOUSTON

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; STATE: TEXAS
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS/ASCII
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/429,964
; FILING DATE: 27-APR-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/021,625
; FILING DATE: 16-FEB-1993
; CLASSIFICATION: 435
; APPLICATION NUMBER: US 07/822,011
; FILING DATE: ABANDONED
; CLASSIFICATION: 435
; APPLICATION NUMBER: PCT/US/91/02650
; FILING DATE: 18-APR-1991
; CLASSIFICATION: 435
; APPLICATION NUMBER: US 07/615,715
; FILING DATE: 20-NOV-1990
; CLASSIFICATION: 435
; APPLICATION NUMBER: US 07/510,706
; FILING DATE: 18-APR-1990 (ABANDONED)
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: PARKER, DAVID L.
; REGISTRATION NUMBER: 32,165
; REFERENCE/DOCKET NUMBER: UTSD:432/PAR
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (512) 418-3000
; TELEFAX: (713) 789-2679
; TELEX: 79-0924
; INFORMATION FOR SEQ ID NO: 37:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-429-964-37

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Query Match      61.9%; Score 13; DB 2; Length 4;
Best Local Similarity 66.7%; Pred. No. 4.1e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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QY      2 GLM 4
      | |
DB      2 GIM 4

```

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Search completed: March 23, 2005, 15:14:28
Job time : 42 secs

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